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On Getting Up Tired, and the Value of Fresh Air

MADAME laments plaintively that she rises from bed as tired as she lay down; limbs aching, eyes bunged, face swollen with sleep. Ask her whether her room is ventilated, and she takes offense, quite as if you had suggested that she wash her face. But don't take it for granted that she knows what ventilation means—ten to one she doesn't. Inquire, and she will tell you she airs the room thoroughly, opening up the bedding, throwing windows wide and shutting the door, leaving things thus a whole hour. You suggest leaving the windows open at night, and at once you note on her face the transition from that "observance of hygiene that is a matter of course to intelligent people," and "one of that eccentric doctor's fads." She may be persuaded to leave the sash raised a half inch if the weather is not too cold, but women love warmth, and as winter nears they have the doors and windows weather-stripped and shut out every possible trickle of the life-giving oxygen; and shut in every particle of the emanations from the body, the deadliest poison existant, to be inhaled over and over again, until they rise, drugged, oppressed, entoxined, to begin the new day unrefreshed and deadly tired, as on all the days gone before.

Goes camping; sleeps in a tent where fresh air can't be entirely excluded. This same woman rises in the morning, to remark how perfectly delightful and invigorating is this air! Same old air she had in Chicago—not quite so pure, perhaps, 'cause there's decaying vegetation and camp-refuse round about.

The skin exhales so much poison that when, on one occasion, it was sealed by applying gold-leaf over the whole body, the child in question died, smothered. Nature provided for to-be-expected bumps and rubs by a continuous growth of epithelium to replace wear. We prevent the wear by the use of clothes, but the epithelial cover keeps forming, so that we must remove this by daily baths and vigorous rubbing with coarse towels. Neglect this, and the excretion cutaneous is impeded and self-poisoning results. The freshness and buoyancy following a morning bath is not all merely reactive.

The great body-sewer is the colon.

Here comes old Groucho—look out, fellows! Old curmudgeon scowling, face blotchy, mouth drawn down, eyes muddy,

ready to jump down your throat if you look at him; sure to find fault and only waiting for somebody to vent his ill-humor upon. Just apply the x-ray of knowledge, and you'll see tucked away in a side-pouch of his colon a couple of pounds of black, stinking stuff, with seeds of the grapes he ate last month embedded in it. Put it on the microscope, and note the billions of microbes swarming in it; the quantities of toxins they are generating; the absorption of these into the blood, which they traverse, bearing to every cell in his body a deadly poison that disorders their operation, weakens their resistance, and imparts to every functionating cell their perverse characteristics. The product of his think-works is tinctured by them; his emotions, his consciousness, his beliefs and ideas, his innate self take on the malefic impress.

Now just watch me prove this. I shall don the invisible cloak of Asmodeus, and when Groucho takes his evening meal I shall slip into his cocktail a little purgative vermuth that will kick up a row in his little insides. For relief, he will hie to the pharmacy and take a double dose of castor oil. In the night the oil, not of the best quality, gripes him; so he gets up and washes out the colon with a copious hot alkaline enema. The whole family becomes aware of it and the neighbors get up and close the windows. But, next morning the office is agog—"What's up with old Groucho! He beamed on us as he came in, cracked a joke with the office boy, who nearly fell dead, and he's actually singing! Why, one would almost believe Groucho was nearly human—if it should ever occur again."

Poor old Groucho! He has been so absorbed in his work that he has neglected to clean out the ashes, and his furnace is so clogged, the fire will hardly burn.

For the pessimism of Carlyle, the forebodings of Cassandra, the unbelief of Shaftesbury, and the hopelessness of Calvin there were reasons. Our thoughts and emotions, our creeds and affections take shape from our physical conditions and are tinctured by our self-engendered toxins. The joy of life lies in purity; and he or she who sees only to the cleanliness of the outside of the platter corporeal does but half the duty incumbent.

We need some one to believe in us—if we do well we want our work commended, our faith corroborated. The individual who thinks well of you, who keeps his mind on your good qualities, and does not look for flaws, is your friend. Who is my brother? I'll tell you: He is one who recognizes the good in me.

—Elbert Hubbard.

A SPARTAN SYSTEM OF HYGIENE

Radically differing from the plan of voluntary enrollment of patients by the physician of their choice, is that presented by Benjamin Moore, of Liverpool. He contemplates the organization of a Bureau of Health, the whole work of preventing disease and caring for the sick to be placed in the hands of the government, and the expenses defrayed by general taxation. Medical treatment would thereupon be free and compulsory. He is quite sanguine to believe that ten years of this system would rid the country of nearly all need for practicians as healers; medical officers being left free to devote themselves to educating the public in sanitation and its enforcement, with the abolition of infectious diseases. There would be work enough for the 32,000 medical men on the British register, whose labors at present are almost wasted because they are misdirected, owing to the present methods of attacking disease, which are medieval in their antiquity and ignorance. His plan comprises a system of state insurance against sickness, and he computes that the present cost would amply provide for the entire expense.

We trust the day is remote when such a plan could be adopted in free America; when the secrets of the sick-room now entrusted to the medical adviser in whom one places confidence should be made a matter of public record by a government official. We doubt whether there is a civilized land so official-ridden as to render this possible. Even in well-harnessed Germany the overwhelming flood of quacks shows the impulse of the individual to assert his right of choice of a medical adviser.

Curiously, *The Pasadena Times* takes our own editorial, advising level yearly payments to the physician of choice, he to assume the role of sanitary director and prevent disease as well as treat it; and against this *The Times* directs an outburst of indignation that would strike the bullseye were it aimed against Moore's plan. We suspect our esteemed lay contemporary got his files mixed, and affixed his diatribe against Moore to our own editorial. Certainly nothing in the latter so much as intimated governmental control or limitation of the individual in his choice of a physician.

Duty well done is noble—if properly advertised it is fame.—G. H. Lorimer.

THEY WOULD LEARN FROM US

The daily papers tell us that a party of more than three hundred leading physicians and scientists of Germany are chartering a steamship, to pay a visit to America next September. They are coming to study medical and social conditions. There is more than usual significance in this item. American medical and scientific men have long appreciated the fact that there is something for them to learn in Germany, well worth a visit, and this is shown by the constantly increasing resort to the great centers of German learning. That Germans should begin to appreciate that there is something on this side of the water worthy of their attention, is creditable to them, as showing that a portion, at least, of the German scientists are not restricted to the narrow limits of their own land altogether. The gentlemen will receive a hearty welcome, and every facility will be placed at their disposal for getting what is to be learned here.

ANTIMONY—A NEGLECTED REMEDY

The writer recently picked up Eustace Smith's little book on "Some Common Remedies" and was surprised and pleased to find a wealth of suggestions about a few of the older drugs. While the book is naturally characterized somewhat by British conservatism, there is nothing halting or uncertain about the author's views, which have been established by a very wide experience rather than by reference to authority.

The writer was particularly interested in the chapter on antimony. Here is an old drug by which our fathers set much store. It is a good drug, and it is to be regretted that its use has fallen into neglect. Following are some points which Dr. Smith makes concerning it—tartar emetic being the form of antimony with which we in America are most familiar.

In catarrhal states of the mucous membrane antimony is still a favorite remedy. It is *the* indicated remedy when we wish to unload the congested vessels and set up free secretion. As long as the cough is hard, secretion is to be encouraged, not checked. Ammonia, squill, paregoric, and other stimulating and antispasmodic drugs are contraindicated in the earlier stages of these catarrhs.

Here is a paragraph that sounds familiar: "Antimony is not given with any view to depressing the patient, and therefore it is advisable to prescribe it in small doses frequently repeated, rather than in larger doses given at longer intervals."

In these cases of acute bronchitis, Dr. Smith says, "When the distress is great, the breathing difficult, the coughing hacking and incessant, and the pulse small and feeble, the beneficial effects of the remedy are most decided, and it will be noted that the lividity and discomfort abate and the feeble pulse gets fuller and stronger as the secretion from the lungs gets more and more abundant and free."

In the early stages of bronchopneumonia in children the remedy is also of decided value, being most beneficial before large areas of lung are involved. It should be used at this stage with belladonna—or atropine.

Another disease in which tartar emetic is beneficial is stridulous laryngitis—catarrhal croup. To secure its full effect, give it in frequent doses, large enough to produce slight nausea. Hot fomentations to the throat are helpful. Useful only in the acute stage, when the temperature is

raised and the distress acute; at a later period, if the spasm persists, change to grindelia.

Dr. Smith reminds us that it is an established fact that all nauseating remedies, when given in minute doses, become gastric sedatives. A bullseye for our homeopathic brethren! One or two minims of wine of antimony is a good addition to the treatment in cases of gastric derangement.

Antimony is not without value as a hepatic stimulant. Moreover, by its influence in promoting secretion, it has an aperient action in chronic constipation. For this purpose it is combined with other remedies.

According to Dr. Smith, the drug is also of value in inflammatory diseases of the skin. In eczema, whether acute or chronic, it is one of the most satisfactory of remedies, provided it is used perseveringly.

Antimony is no longer used with the purpose of producing a profound sedative effect upon the vascular and muscular systems. Its most decided value is in promoting free secretion from the mucous surfaces and from the skin, and for these purposes, Dr. Smith declares, it still remains preeminent.

This old drug, like many others now neglected, will richly repay study, and a perusal of Dr. Smith's booklet will suggest other topics of equal interest.

Heads up! Look the world in the eye! Holmes says: "The men of genius, I fancy, must have erectile heads like the cobra de capello."

MEDICAL LATIN

In a discussion on puerperal eclampsia published in the journal of a certain state medical association, one physician during the discussion said that he had had several cases of "post mortem and ante mortem eclampsia." We wonder what the symptoms of the "post-mortem" eclampsia were. But we wonder still more that the editor could permit this lapsus to pass.

In the same journal we find that the doctor who read the paper on puerperal eclampsia made an examination per vaginum, and gave the patient not only several doses of eleterium, but also some "oil of tiglii."

Aside from these awful offenses against the ghosts of the Latin language, the proofreading of this journal is execrable. And, by the way, the same is true of several other state journals, whose editors show either a lamentable lack of education or inexcusable carelessness, or both—and yet these journals are supposed to reflect our science; to them we are to look for guidance.

CONTINUOUS BATHS

Ballano, last April, reported (*Giornale di Medicina Militari, The Military Surgeon*, July, 1911) a group of cases in which he considers that life or limb was saved by immersion of patients in a continuous bath of 4-percent chlorine water. These were cases of compound comminuted fractures, and the like, with phlegmon or gangrene. The advantages are very great. No occasional dressing can accomplish as much in the way of preventing and destroying infection. The temperature may be regulated so as to relieve pain and to sustain the vitality of parts threatened with death. The interference occasioned by handling and dressing is avoided. It is easy, cheap, and effective. The fever-temperature may be regulated by full baths, but also even by partial ones, as the blood cooled in one limb returns to moderate the general heat of the body. The advantages are not confined to military surgery, by any means.

Some years ago a patient came to me with a terrific fecal abscess, for which the surgeon (Dr. Bayard Holmes) made six incisions down the gluteal, perineal, and posterior thigh regions, each incision being from 12 to 17 inches in length. The tissues were infiltrated with fecal products to an extent for which the term frightful is not an exaggeration. As the only way to disinfect the man, he was put in a bathtub, with warm water containing a generous admixture of sodium sulphocarbolate. This was selected by reason of H. C. Wood's (Sr.) observation, that the flesh of animals that had taken sodium sulphocarbolate showed a remarkable immunity against

decomposition. An efficient antiseptic was required, one that would not by chemical action lessen the vitality of the tissues and increase the tendency to destruction. Contrary to everybody's expectation, the man recovered.

The mechanical difficulties in the way of applying a continuous antiseptic bath to a part of the body, as to a shoulder, are great; but in really desperate cases, there is no special harm in subjecting the entire body to the application of sulphocarbolate solutions, or even of chlorine water, perhaps. One must get out of the habit of associating the idea of antisepsis with such agents as mercuric chloride and phenol, which carry dangers of their own.

In treating morphine habitués, the writer has found that the period of discomfort may be rendered less irksome by putting the patient in a tub of warm water. The one thing such patients dread and complain of more than all else is the indescribable nervousness that comes on after the morphine has been stopped. In such a bath, the patient has neither pain nor ache, he sleeps sufficiently and eats full regular meals; and the man who has not been under the domination of the drug is apt to say, "What more can be asked?" But patients assure me that the nervous discomfort is such that any pain, however acute, would be a relief.

The exact application of certain remedies when exactly indicated—gelseminine, pilocarpine, physostigmine, cicutine, solanine, picrotoxin—goes very far to relieve this condition. Thorough and continued elimination does more—it goes very far in preventing it. Yet there seems to be, in some cases, an unresolved residuum of suffering that should be relieved.

The cold bath is great; and it is the exception when one does not realize such pleasant sensations from the first one that the attendant is not importuned to repeat it every hour or even oftener.

But to some, the hot bath brings more relief. The patient spends in the tub most of the forty-eight hours in which the "ordeal" is concentrated, with an attendant near to see that the patient's head does not slip under the water during sleep. I think the relief is due partly to the relaxation both of psychic and somatic tension, and partly to the elimination induced by the bath. At any rate, it is one of the many devices by which those who are experienced in the treatment of drug habitués may alleviate the suffering of the withdrawal-period and aid in the escape of the victim from his degrading bondage.

Say what you will about blowing one's own horn, a wise man always gets someone else to blow it for him. —"The Silent Partner." We are proud of "Clinical Medicine," and *you* like it. Please toot a little for us—we're out of breath.

WHERE IS OUR FIGHTING SPIRIT?

There is much just complaint by physicians because our profession is ignored, abused and discriminated against. Sometime we shall wake up to the fact that these constant attacks upon us are, in part, because we are too meek to fight our own battles. A beautiful illustration of this fact has just come to my attention.

At the request of the Columbus (Ohio) Board of Education, an open meeting was held in that city, attended by more than two hundred people, to discuss the proposed plan for the medical inspection of the local public schools. Practically every member of the Board was present.

The audience was composed largely, it seems, of Christian scientists, "new-thought" advocates, and avowed irregulars, among them the former editor of *Medical Talk*, principally famous for its denunciation of the physician, drugs and vaccination, and its advocacy and defense of the many absurd healing fads. The latter spoke at some length and, with other speakers, denounced the medical profession, shaking that terrible bug-a-boo, "the medical trust," before the faces of the audience and predicting the downfall of "our liberties," in case physicians should be employed in the Columbus schools, to keep them free from disease and to detect the presence of physical defects in children. The physical needs of the children were not, apparently, of great interest to the speakers.

The most significant part of the newspaper report was the statement that

"*practising physicians took no part in the discussion.*" Isn't it pretty nearly time that our medical organizations, if they are good for anything, should interest themselves in the public welfare, and also in the protection of their own professional interests, which is being imperiled at almost every point and practically without protest on our part? It would seem that when an opportunity like this arose, when the work of the profession could be set forth in plain, straightforward language, its essentially disinterested character made plain, and what it means for life and for death and for the welfare of society, emphasized in a manner that would fix it forever in the minds of hearers, thus nullifying the stultifying pretense of our detractors, there would be dozens of the ablest men of the profession on hand demanding a hearing.

If we have become so "ethical," so good, that we are afraid to fight in the open, for fear of being accused of "advertising," by our lady-like professional associates, then we deserve what is coming to us, should turn the health boards over to the Christian scientists, quit practice, and devote ourselves to solitaire.

Be a good listener. It is better to say too little than too much. We can always learn by listening, while we do not always teach by talking.

THE CAUSE OF LAZINESS

I'm lazy this morning. I rose at 5 o'clock, had my cold plunge, my coffee, and came to the office this cool October morning ready to make things hum—and there are things that need to hum—but I just can't. I sit here idly, helplessly looking at my basket full of delayed work, that has been waiting until I felt up to doing it well enough. I feel like the man who has reached his thirtieth quail a day.

It isn't brain-fag, for I have just come back from a week at my beloved Michigan shore-country outing place, where I sawed and chopped wood to my heart's content and enjoyed the lake breezes and the solitude thoroughly. True, I completed the book there and did the biggest week's work of years with pen, but that is incidental.

Is it age? Sixty-two years surely mean something, and I find myself assuring friends that I "feel young"—disastrous token, the wish fathering the thought. But a man without a trace of old disease or degeneration, alcohol, tobacco or any of the results of dissipation, eating to live, is not old at sixty-two. Syphilis, gonorrhea, malaria are concomitant causes in the genesis of true, physiologic or pathologic age, rather than years.

Metchnikoff says age begins in that relic of a past stage of pre-development, the colon. A strain of fecal toxins in the blood arouses in the tissues those alterations we term degenerations, and these collectively constitute real age. For many years the morning "teaspoonful of saline laxative in a glass of cold water" has not failed to secure a free passage, and the dose has not required an increase. But of late there are signs of insufficiency in wholly emptying the bowel and a few warm alkaline enemas disclose an unsuspected collection in the large bowel. Remove this, and the laziness vanishes; and there comes a delightful sense of freshness, vigor, youth, fitness, a veritable hunger for work and effort that is an amazing change from the conditions preceding.

Laziness is more often autotoxemia than anything else, and we are justified in that diagnosis until some other is apparent.

What timorous rabbits are these our surgeons, that they do not remove the colon and put a radical stop to this evil. Why stop at the appendix? If it is merely a dangerous relic of the past, so is the colon a far more dangerous one.

Deficiency in the eliminative work of the kidneys is another common source of inertness. See if there be a commencing nephritis; or, especially, defective elimination of urinary solids.

Bad habits of feeding are often responsible. Too much meat and other nitrogenous foods, too much coffee, too little water, too little exercise to insure proper digestion; or, on the other hand, too little nutrition and too much reliance on the advertiser who has cunning substitutes for foods

to sell; these be our sources of inertia. Many times this has been dissipated by a square meal, enjoyed despite the fearsome consequences apprehended.

Lead poisoning? Once upon a time a shrewd observer found that the prettily tinted buns exposed in the bakers' windows were colored with lead chromate, and many obscure cases of ill-health were thereby cleared up. Then the matter was forgotten; and beyond a doubt the same old coloring is now employed. Lead has many ways of getting into the food. Arsenic gets into the body in still more unsuspected ways—wall-paper, curtains, fabrics innumerable, whose lovely tints depend on this dangerous element.

These are not all the physical causes that may underlie laziness. In the South the hookworm is held responsible. There may be other "bugs" that the future may discover sapping the mental and physical energies. But after allowing for all known and possible causes for the ailment, is there still an unresolvable residue, a modicum of true essential laziness for which no adequate cause exists, but which is innate to the affected individual?

It would seem like asserting that an effect can exist without a cause; yet it is really only stating that the cause is unknown or that it is so connected with the life-processes as to be physiologic rather than pathologic. Some philosophic observer asserts that every man is as lazy as he dares be. I agree with him. I know I am.

Laziness is quite frequently a habit. I come home, have my dinner, and take up a novel or a magazine. There are some of the late textbooks and monographs, and I might as well read them and thus aid in keeping myself *en rapport* with recent progress; but I fall readily into the habit of light reading. It is just habit, for if I eschew this sort of dissipation and take an hour of solid reading I soon get into the swing of it and do not care for the other. Habit leads one to dawdle over the morning paper an hour instead of glancing through the summary and scanning it on the way down to the office, which is all it deserves from a busy man. Habit wastes many a minute, and quarter-hour, and evening, and day. There is a habit of time-wasting that goes for, and is, laziness.

Not that all time spent away from work is wasted or proof of laziness. There once arose a new word—rizzling. People asked, "Do you rizzle?" Coming home to lunch, you throw yourself on the sofa and close your eyes for five or ten minutes, not asleep, but relaxed and quiet—that's rizzling. It is useful and refreshing.

Brain-fag is another story. Despite your determination, the work grows irksome, and it is simply impossible to drive yourself to it. "You may lead the horse to the water, but you can not make him drink." So you take a week and hie you to the woods, where with rod or gun you get back to nature, and fill up with ozone and empty your soul of meanness. Then you return to the desk and make things fairly fly—ideas just scintillate, problems solve themselves in the stating, difficulties subside, accomplishment follows the whole-souled effort you put into your work.

How about the time when the week proves too short and the expected reaction fails to put in an appearance? Is this a warning? There's an old tale:

Once upon a time Death came and touched the man's arm. "Come," said Death. But the man plead for delay, so pitifully that Death relented and not only gave him more time, but promised him three warnings. In due time Death returned and called the man. Again he plead for longer life, and yet more time, and complained that he had not had the three warnings promised, asking Death to take pity on one for whom life was all. But Death responded that he must have many pleasant things to enjoy. He eagerly denied this, saying that his sight was so poor, his hearing so defective, and his rheumatism so tormenting that life was not enjoyable. "And yet," said Death sternly, "you deny that you have received your three warnings!"

But there are two sides to this matter also. It is easy to say, take the warning and quit work; but we know that the man who stops the work of his life does not

usually live long. Many a man has gone on so long that he is like the old cart-horse who is held up by the shafts. Streeter, who wrote so charmingly of "The Fat of the Land," did not live many years to enjoy his farm. But he carried it on with the same high pressure he had put into his professional work, instead of making it a healthful recreation. There is a scientific way of resting that one should study.

Resting will not in itself confer immortality or postpone death forever. Men seek to sustain themselves by every sort of artificial expedients, calling recklessly on their reserves of vitality until all have been exhausted, and then demand of Rest its miracles. In the treatment of the insane we found that when a man had thus sustained his waning powers on alcohol and other stimulants his case was hopeless, as the reserve upon which recuperation might have been built had been exhausted.

When a man begins to feel it necessary to keep himself up to the mark with alcohol, strychnine or any other abnormal agency, then is the time to rest. If a week's rest proves insufficient, take a month; and if that is not enough, rest until you are fully rested.

What success is worth death? or mental failure? Ten years of enjoyable life can not be purchased with millions; and yet many a man dissipates that much time in trying to win a little more that he can do without with very well.

LABORATORY AND BEDSIDE DIAGNOSIS

Dr. Beverly Robinson of New York pronounces a timely warning, in *The Medical Times* for February, against excessive importance being laid upon laboratory methods, to the neglect or exclusion of careful bedside observation. The former methods are usually designated as "scientific," as against the "practical," or empirical, methods hitherto and even at this day employed by the majority of practicians.

"Unfortunately," the doctor says, "even socalled science is ephemeral at best, and what is seemingly true today is not true tomorrow. On the other hand," he continues, "what is known as empirical is not infrequently the wisdom of the ages and of a host of good observers everywhere. It remains true that the wisdom and horse sense of the old practician is frequently more valuable really to patients than the most refined and latest acquisition of the junior physician, even though his talents may be unquestioned."

We do not wish to be understood as decrying in the least the advantages of exact laboratory methods in the diagnosis of disease, but it is, nevertheless, a fact, and has been frequently called attention to, even in "scientific" Germany, that an improperly exclusive devotion to scientific methods, so called, is exceedingly apt to leave out of consideration the practical and curative management of the pathologic conditions confronting us, and which, after all, are the main reason of our services being required.

Our patients, be it remembered, do not care how a tubercle bacillus or a staphylococcus or a plasmodium malariæ looks; what they want is to get well of their disease, to be restored to health and active life. For that reason, it behooves us not to lay undue stress upon the scientific determination of the exact conditions present, and then lie back in smug satisfaction over a hard task accomplished, but to remember that an exact diagnosis made, our most important task has only begun, namely, that of leading our patients back to health. It is true that in this very purpose the despised "empirical" methods of our predecessors frequently are of greater value than scientific modes of treatment, that is, if based on ill-understood or misapplied theories; or if, as is the case only too frequently, they are the fad of the day.

Further, Dr. Robinson says: "We have only just so many reliable remedies in the drug-line, and they are not many; and as to nursing in a rational and useful way or the employment of physical methods of amelioration, they, the really useful ones, are fairly well understood by the bulk of good practicians of experience."

This latter statement we would emphasize a little more strongly, and, with all defer-

ence to Dr. Robinson's experience and knowledge, we should assert that, after all, there are a good many reliable drugs at our disposal, everyone of which has its different and distinct mode of action upon the organism, the indications for the use of which can very well be determined by the observing and conscientious physician.

In spite of the emphasis laid upon the importance of exact methods of diagnosis, we should lay the much greater stress upon the importance of exact, positive and definite treatment. A correct diagnosis is necessary—most true; but after the diagnosis is made, then it must be acted upon, and must be utilized, not as the final end of our task, but as the means to the actual end aimed at.

And do not pause to lay sufficient stress
Upon that good, strong, true word, Earnestness.
In our impetuous haste, could we but know
Its full, deep meaning, its vast import, oh,
Then might we grasp the secret of success.
—Ella Wheeler Wilcox.

DR. ALEXANDER HUGH FERGUSON

In the November number of CLINICAL MEDICINE, we announced, very briefly, the death of Dr. Alexander Hugh Ferguson, which occurred late in October. Dr. Ferguson was one of the most distinguished surgeons in Chicago and one of the best-known men of our profession in the United States, although he was a Canadian.

He was born in Ontario County, Ontario, February 27, 1853. He was graduated from the Medical Department of the University of Toronto in 1881. After a year spent in visiting the leading hospitals in the United States, England, and Germany, he began practice in Winnipeg in 1882. While residing in that city, he was one of the founders of the Manitoba Medical College in which he was professor of physiology and histology. He was also a member of the staff of the Winnipeg Hospital and connected with other local institutions.

In 1891 he came to Chicago at the invitation of the staff of the Post-Graduate School and Hospital where he was appointed professor of clinical surgery. He immediately took a leading place among the surgeons of this city, holding a chair in the Medical Department of the University of Illinois, becoming head surgeon of the Cook County Hospital, and surgeon-in-chief of the Chicago Hospital, the majority of the stock of which he controlled. About two years ago, Dr. Ferguson disposed of his interest in this latter institution. A year later he was elected president of the Chicago Medical Society.

Some weeks before his death, he was attacked by a carbuncle on the back. This refused to yield to treatment and resulted in general infection, complicated by an attack of pneumonia, and later, peritonitis.

Dr. Ferguson was the "canny Scot," through and through; careful, shrewd, witty; always friendly to everyone, but always judicial. His contributions to surgical science were many and need not be catalogued here, but his unusual ability was shown by the remarkable rapidity with which he established himself in a place of the first professional eminence.

At a time when the Chicago Medical Society was divided by bitter strife, he did not fear to ally himself with what seemed to be the weaker side, with those of the rank and file of the profession. It was upon this platform of real medical democracy that he was elected to the presidency of the Chicago Medical Society.

Dr. Ferguson was a strong man and will be greatly missed. We were proud to count him among our personal friends, and as such we loved and admired him.

DUTY VERSUS POPULARITY: THE CASE OF DR. WOODLING

A rising young physician of far more than average ability was asked why he did not openly favor the active-principle methods, since he knew very well their superiority. He replied that "he found it the best policy to follow the line of least resistance." Had the heroic souls whose achievements stand out as beacon-lights in history for the emulation of the young followed the line of "policy," what would be the condition of humanity today?

Nevertheless as to most of the questions, there are two sides, even to that of the union of heroism with policy. The hero is not necessarily devoid of brains, and may utilize them in his battle.

When the Tennessee came out to attack Farragut's fleet in Mobile Bay, the commander of one of the most formidable vessels in the federal fleet, a double-turreted monitor, ordered that his ship be sent directly at it, regardless of every other consideration. His vessel ran upon a torpedo and was destroyed with all on board. The commander of a much smaller vessel took up his station on the quarter of the ironclad, and persistently drove the shells from his eleven-inch smoothbore cannon into the stern of the Tennessee until he succeeded in jamming her rudder-chains, which rendered her incapable of steerage and won the fight. Who was the hero?

We have a communication before us from Dr. M. E. Woodling, of Las Vegas, New Mexico, telling his remarkable story. It seems that an epidemic of scarlet-fever broke out in that city. Dr. Woodling called upon the authorities to take proper measures for the eradication of the disease, by quarantine and hygienic attention to the infected district. The business interests of the town, however, considered themselves endangered if scarlet-fever should be officially proclaimed as prevalent in the city; and Dr. Woodling's proposition seems to have aroused an animosity never equaled excepting in cases where the financial nerve is wounded. The municipal government, courts, and general public seem to have united in an effort to punish Dr. Woodling for the determined stand he took in the matter. However, in the end they were compelled by the state of the epidemic to come to his position and do what, if it had been done at the time he urged it, would have saved valuable lives.

For his action in this matter, Dr. Woodling seems to have incurred the animosity of the community.

It may be recollected that a similar condition of affairs existed in San Francisco at the time the plague invaded that city, and that nothing but the firm stand taken by the medical officers of the United States Marine Hospital and Public Health Corps, with the backing they received from the Department at Washington, compelled the official recognition of the pest and efforts for its extermination.

Here is precisely one of those cases where duty and policy clash, and where the physician is called upon to make that old choice between the right and the wrong. It depends on one's sense of obligation to duty or of obligation to self-interest which he will choose. But, having made the choice, as Dr. Woodling has done, and finding himself isolated from the community in consequence, where is the remedy? He has tried the courts and they have failed him. Public sentiment seems to be so overwhelmingly against him that no redress could be found, although his case as presented by himself seems to be a clear one.

Under the circumstances, we see but one remedy: that he find a community where independence, professional competence and devotion to duty, even to the extent of the sacrifice of income, home, and self, may be appreciated. Unfortunately Dr. Woodling seems to have allowed his indignation to get the better of him and to have lost his temper. This has detracted from the strength of his position, for calling names is no argument, even though one may be justified by the facts of the case.

This emphasizes our impression as to the only course open to him. No man can hope to succeed who is out of harmony with the public sentiment of his community, be it right or wrong. Moreover, it is not good for a man himself to reside in a community whose views are hostile to his own.

I well remember the case of a young physician, many years ago, whom I found residing in a country community of a strongly old-fashioned "orthodox" religious belief. The doctor had, unfortunately for his interest, imbibed different views on theologic matters, and as a consequence was practically an outcast, shunned by everybody except in case of dire necessity. By my advice, he removed to a larger

community in which he found association, the members of which shared his own views. The difference in the man himself, when, no longer an outcast, he found himself one of many congenial companions, made an impression upon me which time has not effaced. "It is not good for man to live alone."

Dr. Woodling should move to another community, where, by judicious use of his experience in Las Vegas, he should secure such an introduction as would render his success certain. Go into a city as a sanitarian, boldly and openly proclaim your principles, and call upon the people to pay attention to the sanitation of the town before any epidemic disease is prevalent. Preach prevention. Preach it from the house-tops, in conversation, in public lectures if you can hire a hall and induce an audience to attend it, and in the newspapers. This will antagonize nobody and establish your reputation as a modern, scientific, progressive physician, devoted to that idea which everybody believes in, the scientific prevention of disease.

Do not try to live forever; you will not succeed. Use your health, even to the point of wearing it out; that is what health is for. Spend all you have before you die, and do not deceive yourself.—Bernard Shaw.

Which is good and bad. Use your health—and you shall grow stronger; but do not spend it. We need exercise of health, mind and money—but God save us from the exhaustion of any one of the three.

LET THE SPECIALISTS "KEEP UP"

Every once in a while we get a letter from some good doctor who tells us that he no longer needs CLINICAL MEDICINE because he is entering the field of specialism. He feels he needs to use all his available time in the study of the subjects peculiar to his chosen field; this, in itself, is so vast that he must concentrate upon it.

This is all right so far as it goes (we believe in concentration), but too often the specialist fails to remember that the human body is a unit, after all, and that any ailment of one part may react upon many other parts. The most successful specialist is the one who recognizes this fact, and is prepared to diagnose, and, if necessary, treat any condition that may arise, however remote from the organs of his special interest.

Of course the specialist cannot follow out all the infinite lines of research—all the new discoveries; or keep in touch with all the new operations: but he certainly can seek to know what is going on in the field of general medicine. The vital principles, the underlying hypotheses which determine medical thought, are stated, simplified and explained by the general medical publications. Therefore, his reading should include not simply specialty journals and specialty books, but at least one or two of the general organs which will keep him advised of medical progress all along the line and prevent him from losing touch with the vast field of medicine with which, as a general practician, he was, of course, familiar.

There is even more danger of the specialist falling behind the procession than the general practician, who is forced to know something about practically all branches of medical knowledge, even though he may not have obtained the mastery of any particular field. In other words, there is the danger of the specialist becoming *narrow*.

So, we say to our specialist friend who is inclined to cut off the general journal—*don't do it*. You may not need a long list of journals, but you should have at your desk one or two of the best weeklies and the two or three best monthlies—among them, CLINICAL MEDICINE. Through these you will be advised, not only of the work of medicine, but of its humanities—which are, after all, of vital concern to every doctor, whatever the special character of his work.

NAGGING WIVES AND NEURASTHENIC HUSBANDS

Two recent suicides have illustrated a much ignored yet most important sociologic factor with which general practitioners, neurologists, and genitourinary surgeons are forced to deal. To all three of these classes of physicians the neurasthenics, neurotics, and neuropathics apply for care and comfort, and to all of them a serious

element in the problem is that of the nagging wife or husband. This is a very old problem. In the Shakespearan epoch, when a revolt from occultism voiced itself in Dr. Reginald Scott's "Discovery of Witchcraft" and in Harsnett's "Detection of Religious Impostors," the problem found utterance in "The Comedy of Errors." The shrewish wife of Antipholus of Ephesus admits her fault through the keen questioning of the Abbess in whose cloister the Syracusan Antipholus has taken refuge.

ABBESS: You should for that have reprehended him.
ADRIANA: Why, so I did.
ABBESS: Ay, but not rough enough.
ADRIANA: So roughly as my modesty would let me.
ABBESS: Haply in private.
ADRIANA: And in assemblies too.
ABBESS: Ay, but not enough.
ADRIANA: It was the copy of our conference;
In bed he slept not for my urging it;
At board he ate not for my urging it;
Alone, it was the subject of my theme;
In company, I often glanced at it;
Still did I tell him it was vile and bad.
ABBESS: And therefore came it that the man was mad.
The venom clamors of a jealous woman,
Poison more deadly than a mad dog's tooth.
It seems his sleep was hindred by thy railing,
And therefore comes it that his head is light.
Thou say'st his meat was sauced with thy upbraidings.
Unquiet meals make ill digestions,
Whereof the raging fire of fever breed.
And what's a fever but a fit of madness?
Thou say'st his sports were hindered by thy brawls.
Sweet recreation barred, what doth ensue
But moody and dull melancholy,
Kinsman to grim and comfortless despair?
And at her heels a huge infectious troop
Of pale distemperatures and foes who
In food, in sport and life preserving rest
To be disturbed would mad or man or beast.

The soundness of the psychophysiology of the Abbess is quite clear. The toxemic elements resultant on nagging are not neglected. The lesson is one which today we could well heed. The great foe to mental and physical health in the neurasthenic is introspection, which directly causes depression and doubt of mental peace and indirectly aggravates these through creating a vicious circle by inhibiting the poison-destroying function of the liver and the eliminatory power of the kidney.

The case is the worse, as nagging is most often the result of acquired or inherited defect of the higher inhibition on action, and causes an intellectual sense of fatigue or prevents primary egotism rising into consciousness. This evil is increased by the tendency of the neuropathics to intermarry. As W. L. Bannister de Monteyel and others have shown, this is peculiarly great. It lies behind the notoriously great neuropathy of the Jews.

Nagging, as an expression of incompatibility, is a frequent factor in divorce assigned to other causes, under varying names, according to local statutes. Many suicides of husbands during the first year of marriage are due to a feeling of mental impotence aggravated by nagging. As the researches of the Feudists have shown, sexual "knowledge" of a disturbed variety is very frequent in female neuropaths. This "knowledge", like that of the "lost-manhood" quacks, is used freely on the unfortunate marital victim of the neuropath vampire.

MUSHROOMS AS CHEAP FOOD

The increased cost of living! Everybody bewails it. Meat, eggs, milk, sugar, flour, every article by which life can be sustained is being pushed up, until people are paying "all the traffic will bear;" and still the greed of suppliers is unsated.

Meanwhile crime increases on all sides. Burglary, robbery, theft, cheating, murder, every species of guile by which money can be gotten without work becomes more frequent.

The Report of the Chicago vice commission places the blame for women's fall upon the inadequacy of wages to provide for necessities. As surely as the sun rises and sets, so surely will an increase in the cost of living impel men and women to disregard law and to step across the invisible line that separates morality and respectability from sin and shame. Make the loaf dear, and you make thieves; skimp the employee, and you make an embezzler. The more difficult to earn a living seems, the more alluring the ways of vice, and the easier it becomes to slip down into the underworld.

Men begin to calculate diet tables, to measure the nutritive values of food against wages, to think less of sapids and more of calories. Life grows harder, the struggle for existence sterner as the earth becomes crowded.

Meanwhile bounteous nature spreads for us, in every forest dell, on every lawn and pasture field a wealth of wholesome and delicious viands which we pass by unnoting or crush under our heel ruthlessly. Of the six thousand fungi of the United States, three are poisonous, further three unwholesome, but the larger number of the rest afford as appetizing and nutritious food as man could ask. In the shops, cultivated mushrooms bring from fifty cents to a dollar a pound. Many of the wild ones are finer flavored, and are to be had for the gathering. In the city of Chicago alone fifty thousand persons could dine daily on this food for the gourmand without exhausting the supply to be gathered within the municipal limits. Ignorance is costly!

In New York City it is reported that thirty persons have died this summer from eating poisonous mushrooms, gathered with the wholesome varieties.

Truly, ignorance is costly!

Six bad varieties of the mushroom family prevent the utilization of six thousand good ones—and yet, it is easy to distinguish the poisonous kinds, nor difficult to identify the others. The trouble is that the works treating of the fungi are rare and costly, hence not to be found outside of libraries.

Here is a field for public intervention, and some of the states have recognized this. The state of New York has published a volume, beautifully illustrated, describing the fungi found growing within its territory. Mr. T. C. Clements, State Botanist of Minnesota, has issued the fourth volume of "Minnesota Plant Studies," which deals with the mushrooms of that state. He describes over three hundred varieties. The three deadly amanitas (phalloid, vernal, and fly) are figured and described, so that they could not fail to be recognized by any person of average intelligence. Several others are listed as unwholesome, others as doubtful, many as unfit for food for various reasons, or untried; but a surprising number are pronounced "edible," "excellent," or "delicious." A chapter is added on the manner of collection, together with various methods of cooking the different edible sorts. Any family possessing and utilizing this book may have, for the slight trouble of collecting, a daily meal of this, one of the costliest dishes set before the epicure.

If you like mushrooms or feel willing to enjoy a wholesome delectable dish for the trouble of picking it up, get a book on fungi like the one named. Gather all the mushrooms you find, putting each variety in a separate paper bag. Do not take any old ones, but be sure to dig out the whole stem, so that the variety may be recognized.

The three poisonous fungi are all amanitas. These have a centrally inserted stem, the top separating readily; around the stem is a ring or collar, and the base of the stem is bulbous and surrounded by a volva, or onion-like scaly sheath. Place a ripe specimen on a sheet of colored or black paper and shake it, when the spores falling out are seen to be white. Other wholesome mushrooms have the ring or the volva, but no others have both and also the white spores, as is true of the three deadly amanitas.

The amanita phalloides, or death-cup, is 1½ x 4 inches wide, white (rarely olive, brown or yellow), shiny when moist, smooth or rough with fragments of the volva; stem, 3 to 6 inches long, 1-3 to 1-2 inch thick, white, rarely dark, smooth, bulbous, and hollow above the ring close to the cap. The volva may be overlooked if covered with dirt. The deadly amanita grows in the woods from June till October. It contains two poisons, phallin and muscarine.

Phallin is a hemolysin, causing solution of the blood-corpuscles, like snake venoms. It is destroyed by cooking it thoroughly. There is no known antidote, although recent observations indicate that arsenic has some antihemolytic power.

Muscarine is an alkaloid that causes sweating, purging and vomiting, with de-

pression. It is antidoted completely by atropine. If one eats only cooked mushrooms he is safe from phallin, and cannot die from muscarine if he takes enough atropine to keep his mouth dry.

The amanita verna is a variety of the phalloid, and equally deadly.

The amanita muscaria, or fly-cap, is 4 to 6 inches wide, bright-red, or orange, yellow or whitish when old; the top is rough with corky fragments of the volva, which in the early form envelops the whole plant. These fragments may disappear as the fungus ages. The margin is striate, the stem thick, 3 to 6 inches long, white, scaly, bulbous, hollow, the ring large, the volva forming concentric scaly rings on the bulb. It grows in the woods and clearings till frost. It contains only muscarine—no phallin—hence can be antidoted by atropine.

These are the three deadly mushrooms, or socalled "toadstools." Learn to recognize them, even in forms varying from the typical dimensions, but with the ring, volva, and white spores—the three characteristics of the amanitas.

Of the others, Clements pronounces 125 varieties edible, 54 excellent, 24 delicious, 16 doubtful, 10 distasteful, 3 unwholesome, 1 pleasant, and 21 not tested.

Surely, such a wealth of food-resources should not be allowed to go to waste. There is no danger so long as one adheres to the one safe rule of eating no fungus until he has first identified it botanically.

However, to know that a given mushroom is not one of the three deadly amanitas is not enough, since several others are poisonous to some persons. *Old, decayed, wormy mushrooms or those gathered the day before may be unwholesome.* Many varieties are only of value when quite young, as the puff-balls, which should not be eaten after they turn yellow and wrinkle.

The most common mushroom of the Chicago lawns is the hypholoma. It is exceedingly fragile, and decays before its first day of life has ended. It is wholesome, nutritious, and of pleasant flavor, some would say "excellent," but hardly "delicious." The writer and his family use it as any other vegetable, and have consumed bushels of it. The horse-tail coprinus (coprinus comatus) is sometimes found, and fully merits the term delicious. The russulas seem to be doubtful, being unwholesome at some seasons, to some persons or under some conditions, but not under others. An enormous mushroom, as large as a dinner plate and weighing several pounds did not answer the description of any variety listed, but proved to be poisonous—probably a fly-amanita.

STATISTICS

A correspondent writes to inquire if we can give statistics as to the results from the active-principle method of treating such diseases as pneumonia and typhoid fever, compared with the usual methods described in the textbooks.

Among the readers of CLINICAL MEDICINE we know there must be hundreds who keep accurate records of their cases, and who can give us these reports. Will not every one who has such a record send it to us, covering if possible the period before he began the use of the active-principle remedies and since he has used them? These reports should not only tell the number of cases, the duration of each case, the outcome, the complications, and the treatment, but also whether the diagnosis was verified by laboratory methods or not.

We urge everyone who does not keep a record of his cases to begin. The pneumonia season is here, and there are few men who read this issue of CLINICAL MEDICINE who will not have seen a number of cases of this disease before spring comes. Please record these and report them. These reports need not be written out in the form of articles, but may be jotted down briefly on single sheets, if so desired. We ask everyone to give this matter personal attention. Statistics, to be worth while, must be complete, and they must cover a sufficiently large number of cases to make the results reported convincing. We do not want these figures to convince ourselves of the superiority of positive therapeutic methods. We know. But there are thousands of physicians who need evidence which cannot be gainsaid. Will you help us furnish it?

Ulceration of the Stomach

By JOHN DILL ROBERTSON, M. D., Chicago, Illinois
President and Professor of Surgery, Bennett Medical College

EDITORIAL NOTE.—This paper, which deals with the subject of gastric ulcer from the surgical point of view, was promised last month. It should be read in connection with the paper by Dr. Boardman Reed, in the November issue of "Clinical Medicine."

THE stomach may be the seat of various forms of ulceration. The specific ulcerations include the tuberculous, typhoidal, syphilitic, and actinomycotic ulcers.

The Various Forms of Gastric Ulceration

The *tuberculous* ulcer is irregular both in its appearance and outline and is very commonly multiple. Very rarely a *typhoid* ulcer will develop in the stomach as in the bowel. This closely simulates a peptic ulcer, but is more irregular, and develops in the course of the second or third week of typhoid fever.

Gummatous ulcer of the stomach is not so rare as was formerly supposed. There may be multiple minute ulcerations of the wall which partakes of the characteristic of the gummatous ulcer elsewhere—a deep circular ulcer with undermined edges and an irregular sloughing floor. It is very commonly followed by cicatrical contraction. It is not infrequently accompanied by hemorrhage. It responds readily to the usual antisyphilitic treatment.

Only very rarely *actinomycotic* ulceration of the stomach will be encountered. It is characterized by the usual tumorous formation in the gastric wall, followed by ulceration and sinuous tracts. The ulcer has thin, nonindurated undermined edges, and its floor is covered with edematous granulations which contain the pus and the characteristic sulphur-yellow bodies composed of the ray-fungus.

The usual form of gastric ulcer is the *nonspecific round*, or *peptic*, ulcer, also known as the *chronic*, or *perforating*, ulcer, or the *ulcus ex digestione*. This is a round or oval penetrating ulcer of the gastric wall, of indefinite etiology and tending to run a chronic course. It is not a very rare condition, since statistical records of postmortem examinations show that of persons dying from all causes, 1.4 percent show ulcer, while 3.1 percent show the cicatrices of ulcers that have healed.

Etiology

There are certain causes which predispose to the development of gastric ulcer. Among these are sex, it being vastly more common in young women than in men. The usual age is between 20 and 30 for women and 40 for men. Race does not seem to exert much influence on the disease, although it is curious to note that the Japanese seem to be exempt. It is probable that depressing influences, such as that consequent upon prolonged mental anxiety, and the presence of chlorisis and other anemias which produce a marked destruction of the red blood-corpuscles, associated

with hyperchlorhydria, may be responsible for the development of the disease in certain instances. Large cutaneous burns may be followed by gastric, as also by duodenal, ulcer. Arteriosclerosis, by diminishing the blood supply to the stomach and thereby lowering the vitality of the gastric mucosa, may predispose to the disease. There are certain occupations that seem to predispose; thus it is common among cooks, shoemakers, domestics, and mirror polishers. Geographical distribution or environment also seems to favor development of this affection, for records show that it is rare in Russia, fairly common in certain provinces of Germany, and four times as frequent in England as in the United States.

Among the *exciting causes* of the lesion may be mentioned anything giving rise to an interference with the vitality of the tissues of the stomach. Thus it has been supposed that thrombosis and embolism accounted for certain ulcers of the stomach; but if this is so, emboli are but seldom found by the pathologists. The same is true of thrombosis. The drain upon the system by certain menstrual disorders has been thought to be responsible by some. It is certain that gastric ulcer may result mechanically, as from the pressure by tumors external to the stomach; the constant churning of the pyloric extremity of the stomach (Mayo), tight lacing, and direct injury from the presence of foreign bodies may produce an ulcer; and a very common cause is the excessive acidity of the gastric juices (gastrosuccorrhea, or hyperchlorhydria) in certain pathologic states—hence the term "peptic ulcer." The taking of unduly hot food or drink may induce sufficient irritation to give rise to ulceration. Finally, there is an undoubted bacterial infection (Robson) originating in the mouth and producing a bacterial necrosis of the gastric wall, in a certain proportion of the cases.

Pathogenesis

Certain theories have been advanced to account for the development of gastric ulcer. Thus it is claimed by many that certain circulatory disturbances lie at the basis of the disease. Virchow first advanced the theory of thrombosis or embolism; Klebs attributed it to spastic contraction of the arterioles; and others regarded it as due to a transitory venous stasis from muscular contraction of the walls. The theory of hyperchlorhydria, or abnormally increased acidity of the gastric contents, associated with local or general anemia, has a strong following and is probably largely correct. Closely allied to this is the theory of diminished alkalinity of the circulating blood, as is chlorosis, gastric ulcer being not uncommon in chlorotic girls. Stockton has suggested the trophoneurotic theory, which regards gastric ulcer as a morbid process not unlike herpes or Raynaud's disease. Lastly, there must be mentioned the theory which ascribes the disease to the absence of natural power of the gastric mucosa to cover defects that may occur in it.

From all of the foregoing it is possible to derive the following recognized facts which have a decided bearing upon the pathogenesis of gastric ulcer:

1. The disease is commonly met with in chlorotic and hyperchlorhydric individuals, although it may be associated with normal blood and achlorhydria. (2) The disease is characterized by the digestion of a circumscribed area of the stomach-wall. It is well known that dead tissues in the stomach-wall are naturally digested, while the autodigestion of the normal gastric mucosa is impossible. (3) In gastric ulcer certain factors are present that render repair of the lesion difficult. These factors are probably circulatory in nature, since it is known that mechanically produced wounds of the stomach heal readily, while ulcerations of the stomach have occurred under all the pathologic conditions enumerated above.

Pathology

The morbid anatomy of gastric ulcer is intensely interesting. The common site of the ulcer is the pyloric extremity, 80 percent of the cases occurring there. Usually it lies upon the posterior wall. If occurring in the lesser curvature (anterior wall) of the stomach, it also commonly lies toward the pylorus. The ulcer is usually single, but in a small percentage of the cases

(about one-fifth of the number) there may be two or more. Thus Moynihan speaks of the "kissing ulcer," in which an ulcer of the anterior wall is associated with a corresponding ulcer on the posterior wall directly opposite to it. In size it varies from 1 to 4 centimeters in diameter, but may be larger than this. It is not of a uniform depth; thus it may involve only the mucosa or it may perforate the muscularis and stop at the serosa. The latter may be perforated, and the ulceration may even extend to adjacent organs.

Two distinct varieties of ulcer are found. The round, sharply defined sore, appearing as if punched out of the tissue, is the acute form and is much more common in women; while the irregular, ear-shaped ulcer is the chronic, indurated form which occurs most frequently in men. According to Mayo, the latter involves all the coats of the stomach, while the acute and nonindurated form commonly affects the mucosa only and may be so small as to be almost invisible. Fuetterer called attention to the ulcers produced by arteriosclerosis and which generally occur after the thirtieth year of age.

Occasionally a gastric ulcer will show a great amount of pigmentation. The walls of an ulcer are commonly thickened and thimble-like, save in those due to arteriosclerosis, in which case the walls are hook-like.

The microscopic appearances of the ulcer are not typical. The edges generally are more or less terraced, and the muscularis forming the floor may show fatty changes with more or less red-cell infiltration. The inflammatory and productive changes are not marked, though the neighboring vessels may show a proliferating endarteritis.

Complications

A gastric ulcer may persist for a long time without giving rise to serious symptoms other than a certain amount of gastric unrest. At any time in its course, however, sudden complications may arise.

1. *Hemorrhage.*—As already stated, in about half of the cases bleeding may be present. This may come either from an acutely formed ulcer, or may follow ulceration in the floor of a chronic ulcer, eroding one of the smaller gastric vessels, the artery of the lesser curvature or the splenic artery.

2. *Perforation.*—Sudden perforation of a gastric ulcer occurs in fifteen or twenty percent of the cases. This, as a rule, does not occur centrally, but usually to one side of the ulcer. If the ulcer is situated on the anterior surface of the stomach, the opening will occur into the general peritoneal cavity, into which the gastric contents will escape. In other cases the perforation will be minute in size, without escape of the contents of the stomach. Banding lymph will speedily close such an opening as this. If the perforation occur in the posterior wall, the lesser peritoneal cavity will be filled, and this may even-

Ulcers of the Stomach

	Tuberculous	Typhoid	Gummatous	Actinomycotic	Peptic
Location	Any point	Pyloric extremity	Any point	Any point	Commonly in the pyloric extremity and posterior wall, on the upper margin of stomach.
Number	Commonly multiple	Single	Multiple	Multiple	Usually single; may be multiple.
Size	Small	Larger than peptic ulcer	Minute	Medium	1-4 cm. or larger; chronic ulcers may be very large.
Depth	Shallow	Shallow	Deep floor, irregular, sloughing	Deep floor, covered with edamatous granulations, with pus and fungi	Irregular; often deep and may perforate. Floor clean and free from granulations.
Shape	Irregular	Irregular	Circular	Irregular	Round or oval, sharply defined or if punched out, funnel-shaped; irregular in chronic variety.
Walls	Irregular, indurated	Thickened	Edges undermined	Tumorous formation with sinuous tracks, edges thin, nonindurated.	Indurated, edges terraced in the chronic form, raised border infiltrated undermined.

tually perforate into the pleural or the pericardial sacs.

The usual cause of the perforation is a violent muscular contraction brought about by the spasm of the pylorus. This is generally induced by the nondigestion of food; hence, perforation of the ulcer most commonly occurs shortly after a meal. The particles of food themselves may cause mechanical perforation of the ulcer, especially in the acute form.

The symptoms of perforation are acute, severe epigastric pain radiating over the abdomen, associated with profound and immediate collapse, nausea, and very rarely vomiting; there is muscular rigidity; abdominal tympany will develop; and very shortly the signs of acute infective peritonitis will appear. Perforation into the lesser peritoneal cavity, while attended with pain, will not show symptoms of the same degree of severity, and will gradually be followed by the symptoms of perigastric abscess. In some cases of acute perforation death rapidly supervenes. Vomiting is a serious symptom in perforation, since there occurs, under the influence of the muscular contractions, a rapid escape of the gastric contents into the peritoneal cavity.

3. *Chronic inflammatory processes in the neighborhood of the stomach.*—These may coincide with perforation posteriorly, or they may exist prior to and independently of perforation. A partial local peritonitis results—perigastritis—and adhesions form, to the colon, the spleen, liver or pancreas.

4. *Carcinomatous degeneration (ulcus carcinomatosum).*—From six to nine percent of cases of cancer of the stomach arise from degeneration of gastric ulcer. Fuetterer claims that this results from atypical proliferation of the epithelial cells in the indurated area of the chronic ulceration. This process of carcinomatous development consists in an elongation of the glands, the epithelium of which becomes elevated and cylindrical. The multiplication of the cells becomes so excessive that elongation is insufficient and tortuosity results. The cell-nuclei become richer in chromatin; successive layers of epithelial cells develop (not universally so, but in many instances) and cystic degeneration of the glands will follow. This is especially suggestive when it occurs in the lower portion of the glands. Finally, the gland-cells in the dilated mucosa break through into the mucosa covering the muscularis, and adenocarcinoma is present.

Terminations of gastric ulcer.—In some cases the course of gastric ulcer is acute, but in the main it is essentially a chronic disease. It will eventually heal, in most instances; and upon the time consumed in this process will depend the size of the resultant scar. If healing occur early, there will be left a small stellate scar, without any ultimate results. In the case of larger ulcers, as those which have attained the size of a full-developed hand, the resultant scar is large, and in its subsequent process of contraction dangerous constriction may follow. If the ulcer be situated in the cardia, as it occasionally is, stenosis of this orifice may follow; if at the pylorus, stenosis with gastric dilatation will be the result; while if the ulceration has occurred in the central portion of either wall of the stomach, an hour-glass contraction of that organ may be produced.

The microscopic changes that occur during the process of healing have been described by Hauser as follows: At first there occurs a proliferation of tissue in the margin of the ulcerated mucosa. In the center of the scar there develop large numbers of tubules which are lined with cylindrical epithelium, but which have no lumen. This proliferation of tissue is arrested as contraction occurs. At the same time there occurs a regenerative proliferation of connective tissue from the margin of the ulcer, or from neighboring organs—if these form part of the floor of the ulcer. The muscle-fibers do not regenerate.

In a certain percentage of gastric ulcers death occurs from: (1) hemorrhage—either repeated small bleedings or a single large hemorrhage; (2) perforative local or general peritonitis; (3) malnutrition and anemia, which prevent healing; (4) rarely phlegmonous gastritis; (5) cancer.

Diagnosis

The direct diagnosis of gastric ulcer may be made by the history of the pain, vomit-

	GASTRIC ULCER	DUODENAL ULCER	CANCER OF STOMACH	HYPERCHLORHYDRIA	GALLSTONES	NERVOUS GASTRALGIA
Age	Progressively increasing in frequency from puberty to middle age.	Commonly in middle age or later.	Middle and advanced age.	Common at all ages except youth.	Usually in old age. Rare before 35.	Most frequent between 18 and 35.
Sex	More frequent in women.	Usually in males	More common in males. (5 to 4)	More frequent in men.	More frequent in women.	More frequent in women.
Pain	Intense in epigastrium; radiates to left shoulder. Increased by pressure and by ingestion of food. Never entirely disappears. If in lesser curvature or near cardia occurs ½ hour after eating; if pyloric, occurs 3 hours after eating.	Burning or gnawing in character above umbilicus to right of median line. Occurs in periods lasting a few days to several months. Is alleviated by taking food; is most marked from 2 to 5 hours after eating. Relieved by vomiting and pressure.	Occurs early; of a dull gnawing character; in the epigastrium. May (15 to 20%) be absent.	In epigastrium; burning in character. Disappears on taking food or sodium bicarbonate; returns in two or three hours.	In right hypochondrium, radiating to right shoulder; in nature. Not influenced by eating; relieved by pressure. Frequently long intervals (3 or more days) of complete freedom from pain. Sharp, lancinating in character. Not influenced by ingestion of food. Sudden paroxysms occur and disappear as suddenly. May be accompanied by chills and fever.	In epigastrium. Irregular in nature. Not influenced by eating; relieved by pressure. Frequently long intervals (3 or more days) of complete freedom from pain.
Tenderness	Marked over epigastrium, either localized or diffuse.	Frequent to right of median line; may be marked.	May be present in epigastrium; often is absent.	Usually present over epigastrium.	Marked in right hypochondrium during or just after attack.	Not present.
Vomiting	Marked in many cases. Occur 1 to 4 hours after eating.	Most marked in later stages. Occur 2 to 4 hours after eating.	Common, once or twice daily; copious in amount.	Absent.	Common after intense pain; frequently gives relief. Ejects mucus and bitter, greenish fluid.	May occur at any time.
Belching	Gaseous eructations not foul, occurring 2 to 5 hours after eating. Relieved by food and alkalies.	Same as for gastric ulcer.	Usually present and of a fetid odor.	Not usually present.	May be present and may be frequent.	Not marked.
Appetite	Generally not impaired.	Not impaired.	Often very poor.	Often increased; Pica.	Lost to a large extent.	Variable.
Tongue	Dry and red with median white strip; may be smooth and moist or slightly furred.	More coated.	Usually thickly coated.	Clear or slightly furred.	Heavily furred.	Normal.
Lactic acid	Absent	Absent.	Present	Absent.	Absent.	Absent.
Hemorrhage	In 50 to 80 percent of cases; May be a large quantity of clear blood or "coffee grounds"; may be found in stools. May occur on following day. Once arrested does not appear for a long period.	Often present in very small amount or in large amounts. (Melena—large tarry stools)	Frequent in small quantity; coffee grounds in vomitus; often partially decomposed and fetid. Recur frequently.	Absent.	Absent. Is very rare.	Absent.
Complexion	Usually fresh; after severe hemorrhage may be pale and anemic.	Same as in gastric ulcer.	Yellowish and sallow; skin dry and marked cachexia.	Pale.	Yellowish, sallow or greenish.	Pale.
Loss of Nutrition	Only slight	Only in later stages.	Marked emaciation, early and rapid.	None.	Rarely, and then when jaundice is marked.	None.
Perforation	May occur after a short period of illness. Most frequent in women. (4 to 1)	Occurs twice as often as in gastric ulcer. Most often in men. (10 to 1)	May occur in late stages of the disease. Rare.	None.	Rarely.	None.
Tumor	Absent; if ulcer is near pylorus, the latter will be thickened and can be felt as a long smooth body.	None.	Frequently may be palpated. Surface uneven, irregular, easily movable in early stages.	None.	The distended gall-bladder may be palpated.	None.
Gastric fluid	Usually increased in quantity; [illegible] increased by [illegible] acid.	Same as in gastric ulcer.	Usually greatly decreased in quantity.	Increased in quantity and acidity.	Variable.	Variable.

Differential Diagnosis of Gastric Ulcer

ing and hemorrhage, together with an examination of the stomach-contents, which will reveal a considerable amount of free hydrochloric acid. The differential diagnosis may be made by reference to the points contained in the preceding table.

Prognosis

Gastric ulcer is always a condition for anxiety. Death may result suddenly from hemorrhage or perforation; ultimately, in cured cases, cicatrical contraction may result in stenosis, either at the pylorus or cardia, or in hour-glass constriction of the organ. At least 95 percent of patients with perforation die if untreated, while the later the operation is performed, the higher the mortality-rate.

Treatment

This may be medical and surgical. The patient must be put to rest in bed, and all feeding by the stomach must be prohibited for a week or two. As food in any form will excite a flow of gastric juice, it is better to give, instead, rectal injections of normal salt solution, 10 ounces of each, at six-hour intervals. The arrest of the secretion of hyperacid juice will generally be followed by a rapid-healing of the ulcer. Nutritious enemata may then be cautiously tried for a few days, and if there be no return of the symptom, small quantities of predigested food may be given by the mouth. Iodoform or cocaine may be given as local anesthetics, or small doses of morphine to perfect the rest from function. During this interval the stomach is washed out twice daily.

Drugs that have been employed in the treatment of gastric ulcer include silver nitrate, bismuth subnitrate, pepsin, cerium oxalate, caroid and other aids to digestion, together with the alkalis to counteract the excessive acidity. Hemorrhage should be treated by morphine hypodermically, suprarenal extract by the stomach, fragments of ice, and the ice-bag over the epigastrium. Still better is a full dose of atropine, as advised by Prof. Waugh. If the bleeding persists, the abdomen should be opened through a median incision; active hypodermoclysis be instituted, and the stomach incised. The bleeding point or area must then be ligated, cauterized or excised and a gastroenterostomy performed.

Watch the course of the disease closely for indications for surgical intervention. These are, the development of perforation, peritonitis, obstruction or severe hemorrhage; when notwithstanding a course of medical treatment carefully instituted the patient steadily grows worse; or in chronic cases, the occurrence of repeated exacerbations of the symptoms. Excision of the ulcer and posterior gastric enterostomy are the surgical measures to be adopted under these circumstances. In some instances a gastrostomy may be advisable in order to watch the course of a doubtful case. Perforation requires immediate celiotomy, with closure of the opening in the gastric wall according to the usual method of Lembert suturation. It is always best to enlarge the perforation in order to destroy the ulcer walls. Drainage should be made for a few days in these cases, after thorough irrigation and cleansing of the peritoneal cavity. The patient should be kept in the Fowler position after the operation and constant proctoclysis should be practised for thirty-six to forty-eight hours.

This is a condition in which hyoscine and morphine are indicated. Physicians are well aware of the relief afforded by absolute abstinence from food, with small doses of morphine to prevent peristalsis and relieve pain. Add to this the influence of hyoscine in enhancing both, and also in inhibiting gastric secretion, and we have a paliative of exceptional fitness. The same qualities render this combination valuable as an anesthetic, during and after such operations as involve the stomach.

Chronic Appendicitis

A New Aid in Its Diagnosis

By JOSEPH B. BACON, M. D., Macomb, Illinois

Surgeon to the St. Francis Hospital

FOR many years, in operating for abdominal tumors and other causes, which necessitated the opening of the abdomen, I occasionally found a badly crippled appendix. Sometimes it was a very long, chronically inflamed organ; again, a club-shaped, plainly strictured organ; again, one kinked and deformed from peritoneal bands and adhesions. Yet, in getting the history of the case, the symptoms of the tumor, pyosalpynx, or other lesion had overshadowed all those of appendicitis.

It then occurred to me that one might be able to diagnose these chronic appendical cases definitely if one were to prescribe a drug that would uniformly induce active peristalsis of the appendix and thus cause it to become hyperemic and tender under pressure or percussion; on the principle that any diseased part of the body, if overworked, becomes a center for pain and soreness.

I selected castor oil as the drug for use and have given the plan seven years' trial with the most gratifying results. The following is a typical case:

Seven years ago a woman was sent from an adjacent county to the St. Francis Hospital for treatment. Many diagnoses other than appendicitis had been made in her case and quantities of medicine had been taken for a long period of years without any permanent relief. She was the wife of a farmer and the mother of five children; she had had no miscarriages. She weighed 180 pounds. She had a large bony frame, with that characteristic flabby musculature that so often accompanies chronic autoinfection. She had never been confined to her bed with any serious illness, never had had a severe colic. For years (the exact time she could not state) she had felt exhausted after doing ordinary household work, and often for weeks at a time would have, as she expressed it, dyspepsia, chronic constipation, and slight colicky pains in the abdomen. She complained greatly of nervousness and exhaustion which incapacitated her for housework. She was considered hysterical by her physician and friends, hence her mental suffering became unbearable.

On careful examination of all her organs, on three different days, I failed to find anything upon which to base a diagnosis, and yet I felt sure she was suffering from autoinfection and really was ill.

I prescribed two ounces of castor oil to be given at noon and that no food be taken for twenty-four hours. I also ordered that her temperature be taken every four hours. The following day the temperature varied from 97° to 100° F., and thirty-six hours after taking the oil there was distinct tenderness over the appendix even with gentle pressure.

I operated and found an appendix six inches long, with a distinct constriction one and one-half inches from its distal end, no peritoneal adhesions, but the muscular walls very thick and chronically inflamed. She made an uneventful recovery. Gradual improvement in her general health occurred. Two years later I received a letter from her stating that she was in perfect health.

In every case in which I operated where there was distinct tenderness over the appendix twenty-four to thirty-six hours after taking the oil, distinct pathologic changes were found in the appendix warranting the operation.

I have also used the same method in a larger number of cases and proven that there was no chronic appendicitis, thus being able to diagnose more clearly gallstones, gall-bladder lesion, gastric or duodenal ulcer, by eliminating the appendix as a cause of the symptoms.

Pneumonia and How to Treat It

By W. H. AYLESWORTH, M. D., Peoria, Illinois

EDITORIAL NOTE.—Those who believe that something can be done for pneumonia, that the disease is not necessarily a self-limited one, incapable of early arrest, and that it can be profoundly modified by proper treatment, are sometimes asked to submit statistics. Last April, Dr. Wolverton, of North Dakota, told of his success in 200 cases, with a mortality of less than 5 percent—only one death in 141 cases of lobar pneumonia. Dr. Aylesworth reports even a larger number of cases, treated in much the same way. The statistics seem to be available. The methods of these men are worthy of careful study.

DURING the time that I have been a patron and reader of CLINICAL MEDICINE (and that dates back to earliest numbers) I have read many good articles concerning pneumonia and its treatment, but I find in the April, 1911, number an article by Dr. Wolverton of Linton, North Dakota, which describes a mode of treatment more nearly meeting indications and more in accord with my own views than anything brought to my attention.

Favorable Statistics From Author's Practice

In reading the essays on the subject by the various authors, I am struck by the many consecutive changes of remedies resorted to during the same attack. I, myself, begin and end the case with one and the same remedies, only varying the dosage. I do not allow a shirt to be changed, much less a remedy. There is only one exception to this rule with me, and that is in the use of emetin. I give it or I do not give it, according to the consistency of the sputa. If the sputum is thick and hard to raise or the effort to raise it is painful, the patient receives emetin. If the cough is loose and the bronchi are easily cleared by an ordinary effort of coughing, the patient does not get it, nor is it required. During the past eleven years I have made a tabulated statement of 253 cases of pneumonia treated during that time. All ages are represented in this number, and all the various forms. Of these, 78 percent were lobar in character; only one case of double pneumonia was among the number; 4 were traumatic; 31 percent were under the age of 5 years; 12 of the latter cases went on to the formation of pleural abscess and in 4 of these the pus was removed by aspiration; 8 patients had to have ribs resected and drainage-tube introduced. One of the last four named is tuberculous, and is now living in the Denver hills trying to evade a fatal issue, and my judgment is that he will succeed. If he dies, it will be the first and only death in all these 253 cases treated by me. But I want to clinch one fact good and hard while I have a chance, and that is that in none of these cases were the old-fashioned galenical preparations employed; I took no chances on inert drugstore mixtures, but in every instance used the active, sure, reliable remedies known as *active principles*.

The "Do-Nothing" Doctors

Brothers of this alkaloidal "family," do you remember, about two years ago, a "would-be" authority of Chicago writing an article on pneumonia, in which he said that there was no known successful treatment for this disease and that under the most favorable conditions 28 percent of all cases were fatal? Do you not think this would-be authority should throw aside his prejudice, drive himself again into his books, and admit that he does not know anything about it? Such a confession would do his soul good, and his patients would benefit by his gain, after he had got far enough along in his studies to employ the alkaloids safely and sanely. But prejudice is the fence around his field of bigotry and ignorance, and it is hard to compel or entice him to jump over that fence. There are a lot of the profession in behind that fence. Let us persuade them to "come on over."

As for me, I am a "jumper," if the pasture is better in the next field. If in the next field my remedies are surer, more reliable, purer, quicker in action, my service more successful, if I can do more good in the world to my fellowmen, then I refuse to be fenced in, and the whole world is only my boundary, and no fence.

The "Clinical Medicine" Way of Reasoning

About the causes of pneumonia I shall have nothing to say, but the pathology and treatment are of interest. The text-books are very accurate on the pathology, but are not as exact on the treatment—they do not tell you how. It has been left for CLINICAL MEDICINE to educate us doctors in ways that have made them masters of pneumonia and other diseases formerly fatal in too high a percentage under customary methods of treatment.

In pneumonia the pathology relates to the deposit of mucofibrin which plugs the bronchus leading to a lobe, causing swelling of the part closely in contact with it, cutting off blood supply and if that plug is not pulled resulting in abscess of the lobe or lobes to which that clogged bronchus leads. Through this abscess-wall the pus is very rapidly absorbed into the blood, to poison the nerve-centers and lower the pulse-rate and heart's strength. At this very point is where we used to fail, for it is a fact in pneumonia that, if we wait to start in with our stimulants until the heart's action has failed, we cannot stimulate it to normal strength again; but if we begin stimulation early, we can hold the heart's action up to normal if our other treatment is adequate.

But we must pull that plug out of the bronchus. My experience teaches me that early stimulation will carry a pneumonia patient over and usually safely through abscess formation and evacuation, when, if we wait to apply our stimulating remedies after depression comes, death ensues before or during abscess formation and many of the patients die in the congestive stage.

It is on this "fibrous-plug pulling" and this early stimulation that I base my success. It is on this pus-producing part of the pathology that I have put all my thought and study and based all my remedies. And I have satisfied myself by the results. I am also satisfied that early stimulation will jugulate or abort a case of double pneumonia and make it a single-sided one. I am also certain that early stimulation will destroy all chance of gray hepatization in a lung following pneumonia; in other words, I wish to be understood as saying that no gray spots of hepatization will result in a case treated by thorough and early stimulation, but, on the contrary, an old hepatized spot in a lung, that may have been there for months or years, will become absorbed and disappear should that person contract pneumonia and be treated by early and thorough stimulation. I have noticed this many times among the weak and debilitated ones who became my patients for pneumonia treatment. Not all forms of deposit are thus absorbed, but all forms of inflammatory origin outside of traumatic causes will be absorbed.

The symptoms are well marked, being usually a chill, with some tendency to vomit, followed by a rapid rise of temperature of from 2 to 5 degrees, more often reaching 105° F. in children. A child may have a convulsion in the place of the chill. The pulse is very much quickened, respiration about twice as rapid, but shallow and guarded, as if they were afraid of hurting something in taking a full breath. The lips are very red or livid and the face has a dusky flush. Coughing is always or nearly always present in the form of a hacking effort. The material raised at first is colorless and scanty, afterward more profuse, becomes rusty-brown in color or even streaked with blood. Pain in some portion of the lung or pleura, more or less severe and made worse by constant efforts at coughing, is experienced. There are the well-known crepitation, vocal fremitus, dull sound and pain felt on percussion. Breathing sounds are tubular or bronchial in character. Well, let us remember just enough of this rehash of old facts to keep in mind what is present in a given case in hand and what changes are taking place. Now to our treatment.

My Method of Treatment

A pitcher of water, a goblet, and teaspoon are at the bedside. Twenty strychnine arsenate granules, gr. 1-30, 18 granules of atropine, gr. 1-250, 18 digitalin, gr. 1-67, and; 18 glonoin granules, gr. 1-250, are put into the glass. Crush them, and put 24 teaspoonfuls of water in the glass. When completely dissolved, give of this mixture one teaspoonful every one-half hour for three doses. By the end of that time the skin is active. Vasomotor disturbance is overcome. As a plug puller, to remove the fibrous material, to stimulate still further, to defibrinate, give: Ammonium chloride, drs. 2 1-2; antimony and potassium tartrate, grs. 1 1-2; syrup of glycyrrhiza, glycerin, of each sufficient to make a 4-ounce mixture. (Dr. N. S. Davis, *Medical Record*, 1874.) Label: Give one teaspoonful every three hours. As a local application I use equal parts of guaiacol and lanoline. Thin cloths are saturated with this and spread evenly over the chest and all is covered with a well-fitting cotton jacket. If my patient is addicted to the use of alcoholic stimulation, I give him his usual amount, even a little more.

I begin the course by a good, thorough physic with calomel and saline laxative, followed by the sulphocarbolates of lime, zinc, and soda. After this cleaning out I content myself if my patient has but one evacuation per day during the rest of his illness. I give all the brandy my patients can take and be classed as sober. I push every remedy enumerated above to full physiological effect; then I maintain that effect. And I wish to say right here that you cannot maintain the effect with a galenic preparation for one week or ten days and hold steady the effect you want—the stomach will get so irritable that all treatment would have to be suspended. Not so with these principles: they are always kept down, and if the idea of "clean out, clean up, and keep clean" is adhered to, their uniform, steady, and sure effect can be relied upon.

I never use aconite, but I do use *aconitine*. I use aconitine for the first twenty-four hours, but not after that. I depend on emetin to thin the expectoration, and it will do it. It makes the cough less labored. A little morphine, to relax the patient, often is a fine thing to give.

The diet is milk, stale bread, soups, and fruit juices. A well-aired room, without carpet-dust, and no direct draft over my patient, is insisted upon. A good, old woman who has raised a family to act as nurse and *do exactly* what you tell her is in charge.

What, not a trained nurse? Well, not if I can get the right kind of an old woman. You see, I am trying to save my patient, instead of treating and burying him in a scientific way. In fact, I am trying to prevent the grave from hiding one more mistake, and I am very particular about this matter of nursing. Usually I camp very close to the patient until I see the fever gradually coming down, cough getting loose and patient resting. When I have several cases of pneumonia on hand at one time I have very little time for society functions.

The Use of Stimulants

The stimulants used in this treatment are the strychnine arsenate, 1-30 grain, to make the heart a better pump for forcing the blood to parts lacking nutrition. Atropine, a direct heart tonic and stimulant, dilates the bronchi and uncorks clogging mucus, stops the spitting of blood, fortifies the system against shock, and unites with other heart stimulants to keep the heart's action steady and strong. Glonoin, to act with other heart stimulants in order to make their action uniform and steady and to maintain that action. Digitalin, for its direct action on the heart-wall. Ammonium chloride, to defibrinate the fibrous plugs of the bronchi, to stimulate, and to carry to the system the lacking chlorides, or augment them. Tartar emetic, to assist in defibrinating the mucofibrous plugs of the bronchi by thinning the exudations and making them more easily raised. Peach brandy (best) is added to all the other stimulants, to feed, to stimulate, to quiet the craving of some patient who may have that craving, thus leaving nothing undone that would contribute to the comfort of

our patient. The foregoing stimulants as a whole are difficult to improve upon when applied to pneumonia, as they fulfil every indication.

When we defibrinate in the aged or in the young, we should also watch the kidneys, because a lot of waste matter is thrown into these organs for elimination. If some doubtful physician or beginner will only follow closely the treatment outlined in this paper, he will have no hesitancy or dread when called to treat these patients, while, after getting used to this stimulating treatment and watching the cases closely, he will save every one of them if called early.

Lobelia and Pneumonia

By W. W. COX, M. D., Harrold, Texas

EDITORIAL NOTE.—Lobelia was the great panacea of the botanic school, founded by Samuel Thomson. That it has substantial therapeutic merit, and that its possibilities are far greater than it is usually accredited with possessing, we are just beginning to realize.

LOBELIA was introduced by Dr. Samuel Thomson in 1808, and although one of the most useful and powerful agents of our entire therapeutic armamentarium, the medical profession, as a whole, really knew very little about the wonderful properties of this agent until within recent years. It seems strange that an agent so useful as lobelia should have been before the profession so long and yet so little really be learned about it. Still, this is not so strange, when we stop to consider that the contemporaries and enemies of Dr. Samuel Thomson really knew but little about this agent, yet persisted in ascribing to it properties which it never possessed. Although Dr. Thomson and his followers for over one hundred years have classed lobelia among the nontoxic agents, and as such, have used and prescribed it liberally, all writers except Dr. Thomson and his followers have, so far as we know, classed this agent among the poisonous narcotics. As an evidence of the erroneous impressions concerning this agent, note the statements of recent experimenters, that the agent given in 1- and 2-dram doses, hypodermatically, does not act as a depressant. It seems superfluous, at this late date, that authorities should be quoted in substantiation of this position, since the agent has been in use so long; nevertheless a few will be given.

Dr. Thomson, himself, declared it nontoxic, and says that an excess above a normal dose is thrown off by the system without doing any harm. Prof. Wm. Cook, author of Cook's "Materia Medica," says: "I have given 6 ounces of the herb to a babe, six months old, in two hours, and have given a child of five years 4 ounces of the seed [said to be twice as strong] in seven hours, and had it retained." Surely, if a quarter of a pound of the seed did not prove toxic there is very little danger in it. Prof. W. Tully, of Yale College, says, in a letter to Dr. H. Lee, 1838: "It is true that I have stated in my public instructions that lobelia inflata is entirely destitute of any narcotic power. I have been in the habit of employing this agent for twenty-seven years and of witnessing its employment by others for the same length of time in large quantities and for a long period without the least trace of any narcotic effect."

Properties of Lobelia

Now, as to its properties. Prof. Wm. Cook says: "Lobelia is a pure relaxant, possessing the faintest moiety of stimulating property and this of the most transient character [that is, stimulating property], expending itself upon the fauces, glands, and mucous membrane of the mouth and respiratory organs. The circulation is materially equalized by its use and the blood-vessels relieved from a condition of tension, whether the case be one of inflammation or fever. By relaxing the circulatory apparatus it favors a full outward flow of

blood with diaphoresis; secures greater fulness and softness of the pulse with a reduced excitability of the heart; and from the universatility of this influence, expedites the reestablishment of the secretions of the skin, liver, and kidneys."

On account of the effects as here enumerated, some have classed lobelia among the cathartics. However, Dr. Thomson says, and that after having used the drug twenty years, he was unable to ascribe to it any cathartic action. These effects upon the liver, skin and kidneys above mentioned are due, no doubt, to its action in bringing about normal secretions and excretions through its powerful influence over the vasomotor apparatus, thus equalizing the circulation and restoring normal functions to all the organs.

Thus it will be seen that by reason of this power of equalizing the circulation this drug has a wide application, and to mention here particular diseases in which the same would be useful would be an unnecessary digression. Suffice it to say that, if we keep before our minds the fact that this agent is one of the most powerful, yet harmless, relaxants, known and hence indicated wherever relaxation of the tissues is indicated, we can seldom go astray in thus using it. Imagine any condition where there is an elevated temperature with high tension of pulse, or some conditions where there is even the wiry, thready pulse, and you have in lobelia a powerful and harmless relaxant to meet that condition.

Effects of Over-Dosage

Lobelia, however, notwithstanding all the praise we have given it, has some very alarming and exciting properties. Sometimes, when taken in too large doses, it gives rise to violent distress and cramping in the stomach, causing the patient perhaps to jump out of the bed and roll on the floor; to try to climb a wall or make other foolish and maniacal demonstrations. But this effect is only momentary, and soon a feeling of ease and comfort supervenes. This action of the drug in sometimes causing great distress or uneasiness and alarming symptoms, when taken in large doses, is explained by Prof. Cook as being due to too sudden relaxation of one part of the system before it has had time to reach all parts of the system, thus disturbing the equilibrium before the agent has had time to be generally diffused and bring the entire body under its equalizing influence.

A person can also be so thoroughly relaxed with lobelia that he cannot move a muscle, raise a finger or even so much as "bat an eye." This condition is known as the stage of "alarm"; so named, perhaps, from the fact that it does give rise to real alarm if observed by one who has never before witnessed it. I have often wondered whether anesthesia accompanies this stage of "alarm," and if an opportunity ever again presents itself I shall certainly make a test. I feel pretty certain, however, of one thing, and that is, that no matter how much a patient might be punished while in this condition he would be powerless to remonstrate, yet the sensory function might be as acute as or even more acute than under normal conditions.

"I have seen a patient who would lie and sob like a child who had been punished, for two hours, not able to speak or raise his hand to his head, and the next day be about, and soon get well. In cases where considerable opium has been taken and lobelia is administered, it will, in its operation, produce the same appearance and symptoms that are produced by opium when first given, which, having lain dormant, is aroused into action by the enlivening qualities of this medicine. The patient will be thrown into a senseless state; the whole system will be disturbed with tumbling in every direction; it will take two or three to hold him on the bed; he grows cold as if dying, remaining in this way from two to eight hours; and then awake, like one from sleep after a good night's rest, and entirely calm and sensible, as though nothing had ailed him. Patients seldom have more than one of these turns, as it is the last struggle of the disease and they generally begin to recover from that time." (Dr. Samuel Thomson.)

Action Like That of No Other Drug

There is no agent in the entire materia medica, so far as we know, with which

lobelia can properly be compared. While it slows the pulse and reduces temperature like veratrum or gelsemium, yet, unlike these agents, it never reduces the pulse or respiration below normal, no matter to what extent it is pushed.

When given cold in average doses, where there is a full, foul or fermented condition of the stomach, it acts as a very quick emetic, especially if it is combined with such stimulants as capsicum and ginger; so also does combining it with an alkali (as carbonate of sodium) increase its emetic properties—and in these conditions and thus combined one need not want a more rapid emetic, the result being almost instantaneous.

Given in a little hot water and on an empty stomach, lobelia seldom produces emesis. Beginning with 5-drop doses of the fluid extract or tincture, or even, sometimes, much larger doses, repeating every fifteen to thirty minutes and gradually increasing the dose, say to 30 drops, the entire system can be brought thoroughly under its influence without emesis. Furthermore, given in minute doses of 1 or 2 drops of the tincture or fluid extract in a little hot water, it acts as a very satisfactory sedative in irritable stomachs, often allaying vomiting when other agents fail.

Dr. Thomson spoke of its beneficial effects in curing asthma, as far back as 1808. He says: "I cured a woman in Newington of the asthma who had not lain in her bed for six months. She lay in bed the first night after the treatment."

A Case in the "Alarm" Stage

I myself never saw but one case in the stage of "alarm," produced unintentionally, however, and this after I had practised medicine for twelve years. Never having seen a case, I had almost forgotten that lobelia produces such an effect. To a little boy seven years of age, who was almost asphyxiated from laryngeal diphtheria, I gave, every fifteen minutes, in a little hot water, 30 drops of the fluid extract, for six doses, when I rested. And lo! the boy rested, but the family rested not. They walked the floor for the next two hours, but my little patient was apparently dead to the world. If he had been profoundly intoxicated from liquor he would not have been any more limber and seemingly unconscious. All of the lobelia was retained. Prior to reaching this stage he always responded quickly to every call to take medicine and raised himself in bed for that purpose, but now he could not be aroused nor even made to open his eyes, showing no signs of life except the respiration and pulse. He was as limber as if he had not a bone in his body, and when raised and shaken in an endeavor to arouse him his head rolled around and fell upon his chest as limp as if the neck had been broken. It was useless to try to arouse him. Each effort to do so only alarmed the family the more, they suggesting among themselves that the doctor had given an opiate. I assured them that I had given no opiate, but only medicine to relax the patient thoroughly and enable him to breathe and rest better; that the medicine was perfectly harmless; that the patient would come out all right, without any bad after-effects, and really feel the better afterwards. All of which came true.

During this "alarm" stage the pulse was full, soft, and reduced somewhat in frequency, perhaps ten beats slower than before; the respiration was free, deep and regular; a gentle perspiration covered the entire body—not of a colliquative nature, but just enough to give the skin a soft, moist, velvety feeling. After an hour and a half or two hours of this stage of "alarm" the boy turned over, coughed up some tough mucus streaked with blood, then was again wide awake and responded to every call as before.

To a young lady suffering from a severe attack of pneumonia, which had been ushered in with a chill followed by a hot, burning pain in the chest and a temperature of 103. 5° F. I gave, every two hours, a No. 2 capsule filled with 12 parts of pulverized lobelia seed and 9 parts of pulverized capsicum. About fifteen minutes after taking the capsule she placed her hand upon her stomach and suddenly cried out to her mother "Oh, he's poisoned me, he's poisoned me!" The mother promptly was assured that there was no cause for alarm; that her

daughter would soon feel easy; that there was no danger whatever in the medicine. This conversation had scarcely passed, when the girl became easy and was soon in smiles. The temperature quickly dropped to about 102.5°. The temperature continued to fall, till on the fourth day it was normal, when the patient was dismissed. This simple treatment followed by a cleansing of the intestinal tract constituted all the treatment.

Of course, this is an extreme case, these alarming symptoms not occurring, perhaps, one time in forty; but this case is only given to show what may sometimes be expected. It will surprise one how nicely this combination equalizes the circulation, lowering tension, softening the pulse, producing a normal diaphoresis, and in thus bringing about a normal action of the body-functions it conduces to the general comfort of the patient.

"Equalize the circulation and nervous action." I do not know the author of this oft-quoted expression, but it is the ideal condition; and when this is obtained, what more could one desire and that's what this combination does. Nervines can and should be added to this, if indicated. I believe this treatment will abort many cases, and it is often appropriately continued throughout the course of the disease but more stimulation, or heart tonics may be added if deemed necessary.

The following year, after the occurrence related this girl's father was stricken with pneumonia, and although attended by several physicians (the writer not among the number) he passed into the great beyond on about the ninth day.

Advantages of Lobelia Treatment

The beauty of this treatment is that it can be pushed to its full physiologic effect (which is nausea) without doing one particle of harm; in fact, when you reach the point of nausea and hold your patient there, increasing or decreasing the dose a little as may be necessary, and yet have the medicine retained, you may feel almost as sure as anything in medicine that your patient is not liable to pass over the great river. The writer doubts very much whether any improvement upon this simple treatment, from the standpoint of death-losses, will ever be made.

Of course auxiliary measures, such as cleaning out the bowels, and the topical applications, consisting either of the glycerinated pastes or hot poultices of bran or mush sprinkled over with lobelia seed and applied to the chest, are not to be forgotten. Nausea and systemic relaxation is sometimes produced by sprinkling upon the poultice too thick a layer of the lobelia seed.

The death-rate in Oklahoma, in 1909, from pneumonia was given at over 55 percent. Oklahoma's vital statistics for July, 1911, show 28 cases of pneumonia, and 23 deaths, almost 100 percent. I am inclined to think there is something wrong with these figures, but if true, it is horrible to contemplate. Yet I dare say. that under the simple treatment outlined herein the losses would not have exceeded 5 percent.

Just here permit me to protest against the advice and practice of some of placing too much stress on first cleansing the alimentary canal and only as a second consideration directing the attention to the removal of the congested condition of the lung as of secondary importance in the treatment of pneumonia. It seems that such practitioners have the cart before the horse.

It is now pretty generally admitted that pneumonia can be aborted. If not now admitted, it might as well be, for it will in time have to be admitted. It is further admitted that the longer the lung remains congested, the greater the danger of exudation; and when exudation takes place we have a pathologic condition to deal with, hence still greater danger. Then why wait six or eight hours for the cathartic to act before directing attention to the congested lung? The cathartic may wait a few hours, and in many instances might not need special attention; but I maintain that it is dangerous and not giving the patient the best chance for his life not at once to direct attention to the congested organ.

We now know to a certainty how to remove this congestion; exactly what agents to administer to give our patient the very best chance for his life without any "may-

hi sos," or without "trying a little" of this or a little of that. It was all right to "try a little whisky," or "try a little morphine," or "try a little quinine" away back in the dark ages, but now there is no longer any excuse for such ignorance.

We now know there are very few reliable agents with which to begin the treatment of pneumonia, and they are the relaxants, such as lobelia (or lobelin), veratrine, aconitine, etc., with, perhaps, the slightest moiety of stimulation in the beginning—just enough stimulation to make the relaxants more diffusive, increasing their usefulness and taking the work off the already overworked heart; and for this purpose ginger and capsicum are very appropriate and later cactin, strychnine arsenate and digitalin, if necessary. I have had very little experience with lobelin, but from my limited knowledge of it I think it would be appropriate, more pleasant, to give and do all that the agent would do in any other form. I heard hypodermatic injections of lobelia in such cases as eclampsia, tetanus, etc., recommended some thirteen years back, but never used it but once hypodermatically, and this nine years ago. In such cases as tetanus, eclampsia, or violent convulsions, either tonic or clonic, from which the patient appears in great danger, I should not hesitate to use lobelia (or lobelin) without stint or measure.

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[Lobelia is so highly lauded by the botanic or physiomedical school that we are glad of this opportunity to present the claims made for it. Considering the violence of the reaction that sometimes follows its use some of us may question its nontoxic character; but that it is a valuable drug those who have used it do not doubt.—ED.]

Recollections of an Agency Physician

A Doctor's Life Among Indians

By JAMES L. NEAVE, M. D., Dresden, Ohio

EDITORIAL NOTE.—Dr. Moody's fine Indian series has stimulated another reader of "Clinical Medicine" to tell us something of life among the red men, as he saw it years ago.

I HAVE taken great interest in reading the series of articles on the Nez Percés Indians by Dr. Moody; and noticing they were not strictly medical, but none the less interesting on that account, it occurred to me that possibly certain experiences of my own among the Indians might be of sufficient interest to appear as a sort of complement to the Doctor's articles.

Among the Arickaree, Gros Ventres and the Mandan Tribes

It was my privilege to spend seven years of my life at Fort Berthold, North Dakota, among the Arickaree, Gros Ventres and Mandan Indians, as government physician. Naturally, the life was different from any that I had been accustomed to, and the happenings that filled in that life were different from any in my previous experience.

When I first went among them, I was naturally received with some distrust; the socalled medicine that they were accustomed to being entirely different from an intelligent system of healing that I was supposed, at least, to represent. Also the socalled medicine-men were perfectly aware that any foothold I might obtain would be at their expense, in the way of influence as well as in their manner of making a living. Not that the Indians paid the white physician anything (my salary was paid by the government), but if they got well under his ministrations, they did not have to call on their own medicine-man, and thus he was out his fee. Also, any influence I might obtain would be

that much lessening of their own; and of this they were exceedingly jealous. I will remark, in passing, that before I finally resigned my position I had succeeded in practically undermining their power, and yet, for all of that, enjoyed the friendship and regard of almost every one of the medicine-men; so much so, in fact, that they nearly always called me into their own homes in case of sickness.

"All of Us Doctors Are Frauds"

On this subject let me relate a little incident, and the reader may place his own construction upon it. My good friend, old Dr. Two Crows (Ka-Ka-Pitk), one day, in my office, very confidentially expressed the opinion that we ought to agree to help each other. Each of us, he said, was a doctor among his own people. We were both frauds, he in his way, I in mine, and we both knew it. Therefore, this copper-hued humbug opined, I should treat him to a drink of whisky, on the strength of our newly discovered and esteemed brotherhood. Without a word I proceeded, with serious mien, to mix up some syrup and peppermint water and gravely handed it to my "brother-in-fraud." With a delighted look the "doctor" stepped into a corner of the dispensary, lovingly placed one hand over his abdomen, blissfully closed his eyes, and poured down his expectant throat what he fondly supposed was whisky. But, say! you should have seen the grieved expression, mingled with deepest disgust, that overspread the features of the old cheat as he placed the glass on the counter, drew his blanket over his head and silently stalked out. There was fraud somewhere, certainly. He never again asked me for a brotherly "finger " of whisky.

A Very Bad Combination

Speaking of whisky, reminds me of the well-known fact that whisky and an Indian make an exceedingly bad combination. As an illustration, I have in mind my friend Bad Gun, who was quite a decent sort when sober. But get him drunk—well, the best policy, especially for a white man, was to be reminded of urgent business out of this Indian's immediate neighborhood. The old fellow would do up his hair in a loose knot, which he invariably placed over one ear. He never adopted this particular tonsorial arrangement except when he was hunting trouble, so that it came to be called Bad Gun's war-bang. He also put on his oldest clothes, provided he wore any. Sometimes, however, he wore nothing but his breech-cloth and paint. Grabbing his tomahawk, and at times his rifle, he would jump onto his pony and rush pell-mell for the trader's store. Reaching there, he would charge up and down, striking the logs with his tomahawk and occasionally sending a bullet in that direction—a picture of a wild, ungovernable savage. The Indians invariably warned the trader of impending trouble, when he would close the store, barricade the doors and windows, and retire upstairs, where he was safe from bullets; the Indians themselves kept cautiously out of sight. This is only an example of the way whisky generally affects an Indian.

The Treacherous Cache-Hole

Speaking of the trader's store, calls to mind an occurrence that is more interesting for me to think about now than it was at the time of the occurrence. In the old days, when the Indians were yet in danger of hostile incursions from other tribes, it was a common practice to bury much of their provisions in cache-holes resembling cisterns in course of construction. One of these cache-holes was located in front of this trader's store, but it had been abandoned, the mouth had been covered over with boards and earth, and then was forgotten.

One day, as I galloped my pony in front of the store, I all of a sudden flew out of the saddle, turned a somersault over the horse's head and landed on elbows and knees, fortunately far enough beyond not to be struck by the animal which also turned head over heels and lay there, heels up, braced over a hole by the horn of the saddle on one side and by his head on the other. It turned out that the pony had struck squarely on the concealed rotten boards over the cache-hole described and had gone in the full length of his forelegs. Luckily,

neither of us was seriously hurt. In those days, however, I guess I was about half Indian—dressed carelessly, about lived in the saddle, always rode at a gallop, and could stand more knocking around than I can at present, and a little thing as here just described did not bother me much.

Syphilis, Followed by Typhoid Fever

In a former article I spoke of the prevalence of syphilis in its various forms among the Indians, and of the activity of the poison if transmitted to a white man. My memory reverts to an interesting case along this line. At one time I was treating an Indian woman with a venereal ulcer on the vulva, that was large and deep, the size of the end of one's thumb. I gave her blue ointment. With this she plugged the hole, then rented herself out to a white man for temporary purposes, and the intimate point of contact was directly across this ointment-filled sore. Strange as it may seem, the man later developed a beautiful case of syphilitic eruption. followed by an almost perfect case of alopecia, he becoming almost as bald as a billiard ball. Later he had a very severe attack of typhoid fever from which he eventually recovered. After that, as long as I kept track of him, he never had any further symptoms of syphilitic taint. Does anyone suppose that typhoid fever could so modify the system as to result in a cure for syphilis? *Quien sabe?*

Western Sandstorms and Blizzards

Yes, I have been mixed up with sandstorms as well as blizzards. A sandstorm you might call a sort of summer blizzard with sand substituted for snow. When a sandstorm comes fooling around, it lasts several days. It fills your eyes and lungs and incidentally your neck with fine, sharp grains of sand. Trying to see is a nuisance, and breathing is a delusion. It blows in between the sashes of your window, sends a stream through the keyhole, and will hunt up a crack in your door that you hadn't noticed before and pile up on your carpet. You stay indoors mostly during the sand movement—don't seem to have any business in the outer world.

Blizzards? Well, it's just about the same thing when a real one pays you a visit during the winter. First the snow comes down out of the clouds, then it blows up from the ground, and then you imagine it comes from all four points of the compass at once. Then you turn to get your back to the wind, and next you lose all sense of direction—and that is the time you get lost.

The air is filled with fine, sharp needle-points of snow going any number of miles a minute, and you can't see; and you gasp for breath; and the thermometer keeps going down to 30 or 40 or 50 degrees below the zero point, and you freeze—unless you get into a house or under cover of the right sort.

I have been in blizzards and should have been lost once, only I ran face first into a high-board fence that I did not see until I struck it; and then I didn't see it nearly as much as I felt it. A blizzard lasts about three days blowing one way, and then three days blowing in the opposite direction.

Being often caught in small blizzards, I developed the faculty of dropping the eyelid on the side toward the storm and using the bridge of the nose as a shield for the other eye, which I kept wide open. The ability thus acquired to hold the eyelids in this manner for indefinite periods comes handy to this day.

As an example of how much lost a person may become in a blizzard, I recall an instance among a number of similar ones, where our mail driver lay all night under his mail wagon, covered head and feet with his buffalo robe, not knowing that he was about one hundred yards fron his station, where a cup of hot coffee and a warm bed were awaiting his arrival. When he came in at daybreak, the air was filled with profanity about as full as it had been the night before with snow.

Mrs. Black Bear—Termagent

Indians, like other human beings, have tempers, and some of the exhibitions that I was witness to were decidedly of the explosive variety. Mrs. Black Bear was of the termagent variety, and the language that she was master of seemed of the lurid style, although the words came so fast that

no one but an Indian could possibly understand them. The way she would pour out her vocabulary, mitrailleuse-fashion, over the head of her spouse was interesting to everyone but the man affected. At last he rebelled and left her—and took to himself Mrs. Two Bears, for his new wife.

One hapless day, after the new arrangement of these domestic affairs had been running a short time, Mrs. Two Bears was chopping wood for the clerk, standing with her back toward the Indian village. But, unforeseen, the abandoned wife made her appearance in the yard, carrying an empty iron bucket, espied her hated rival, slipped up behind and struck her might and main with the bucket. Events followed so quickly that onlookers could scarcely keep track of the two thoroughly infuriated women. Mrs. Two Bears let out a screech, ran into the clerk's house, grabbed up a heavy knife nearly eighteen inches long, and was back at her rival before the onlookers realized the gravity of the situation. Mrs. Black Bear was struck on the head and had a long gash inflicted. Blood, hair, squaws, dust, screams, confusion and excitement filled the air for a few moments—but the combatants were finally separated and quiet was restored. Then I sewed up Mrs. Black Bear, who had sustained but a scalp wound, after all. It was found that Mrs. Two Bears in grabbing the knife held it topside down, so that she struck with the back of the knife instead of the edge, or there would have been a more disagreeable ending to the affair, probably.

This same Mrs. Black Bear at one time became angered at one of our employees who was issuing meat to the Indians, because the piece given her did not suit her ladyship. She flung the piece onto the floor, jerked her knife out of her belt and struck a downward blow at the man; but, the latter bending in and springing back, the knife merely grazed his shirt and pants, struck the floor, and stuck there. Thus, luckily, a fatal termination was avoided.

Some Surgical Experiences

One of the worst-looking gunshot wounds that came under my care occurred in the person of one of the white employees at the agency. He had been hunting over the prairie, riding in a light wagon. His rifle, a 44-caliber army Winchester, had been carelessly laid in the bottom of the wagon with the hammer raised at full-cock. Sighting game, he stopped, ran around to the tail end of the wagon and tried to jerk out the rifle, muzzle end first. As might have been expected, the gun went off and the bullet plowed clear through his upper arm. At the bottom of the ugly wound could be plainly seen the brachial artery, apparently untouched. It was a most wonderful wound, because of several peculiarities. That a bullet of this size should make such a hole under the circumstances related and leave the artery and bone untouched, seemed almost incredible. The only explanation I can hazard is, that the man was very fleshy with a very fleshy arm, and presumably the two cushions of fat on the chest and arm kept a space between the ribs and humerus sufficient to permit the bullet to pass through harmlessly as it were. The arm recovered without the formation of any pus.

Other difficult surgical cases came under my care, and I did not always get much credit for my work, either. Once, an Indian, when attempting to pull a harrow from his loaded farm wagon, tripped, fell backward, the heavy harrow toppled down on him, teeth first, and one tooth was driven deeply into his thigh, pinning him to the ground. When I saw him later, the thigh was hot and inflamed. A poultice, to start suppuration, would have been the proper thing, but I knew it would be perfectly useless to suggest such a thing. As a compromise, I suggested wrapping the thigh in cotton batting, which I directed to be kept wet with hot water. The cotton was accepted and I was told that it would be used. On calling the next day, I found the bundle of batting hanging on the bedpost, still in its original wrapper. Asking for an explanation, I was informed that if the cotton was "good medicine," it would do as much good hanging to the bedpost as it would if wrapped around the leg, and this was less trouble.

Possibly the fellow was right. Who knows? As a finale, I will state that the

wound had never been cleaned in the slightest degree; and, further, that the man made an uneventful recovery. How is that for us to contemplate in these days of surgical cleanliness, antisepsis, and germiphobia? I dressed a fractured clavicle for one adult Indian, getting a splendid job with the broken ends of the bone in a nice position. Next day the bandages were all off, because the man felt more comfortable without them. I replaced them, only to find them moved the next day. One more repetition, and I gave up. Yet, for all that, the Indian recovered, with a fairly good result.

They Are Voracious Eaters, and Improvident

Indians were accustomed to eating when they had anything to eat—and starving with gravity and decorum when the supplies gave out. When a hunter came in with any game, he called in all his relations and all his wife's relations and they had a feast. Incidentally, they stuffed themselves, for it was the custom to clean the platter and leave nothing for the next day—that might take care of itself. The Government actually had to force them to save wheat and potatoes for seed or they would use all they had and then apply to the agent at planting time for seed. The Government built cellars for them, and then, when the cellars were dilapidated, the Indians refused to repair them until they were paid for doing so. They were compelled to store their wheat in the mill, the agent giving them slips showing the number of bushels stored by each individual. They would draw on the mill for flour, and then nearly raised an insurrection when in the end they failed to get out as much wheat as they had stored. They could not be made to understand that they had used up some in flour, and that shrinkage had to be allowed for.

Referring to the native's eating capacity, let me tell of an incident that occurred at Fort Stevenson. The officers were discussing the wonderful capacity of the Indian stomach, when old Crows Breast appeared in the Fort. He was a husky specimen, and the officers decided he would be a good example to experiment with. So they agreed that several of them would hold themselves ready to invite him to dinner, one at a time, and test his capacity. When he put in an appearance at the store, one of the officers invited him to dinner. Taking him to his home, the officer allowed him to eat all he would; then he took him back to the store. Thereupon another officer invited him out, he partook of another good dinner, and was again returned to the store. A third officer took him home and attempted to fill him. But when he accepted a fourth invitation, the officers threw up the sponge and incontinently fled, leaving this sociable child of nature disconsolate to think that these men should discontinue so abruptly their hospitality. The problem of "how much can an Indian hold" is still an unsolved enigma, an algebraic x as it were.

Wily Old Sitting Bull

One of the notables that it was my good fortune to meet was the redoubtable Sitting Bull. The Sioux and the Indians belonging to Fort Berthold were deadly enemies, and had been for years. Consequently the sudden appearance of Sitting Bull set us to thinking. He dropped into the Agency proper, one evening, and asked the agent to permit him to remain over night, and to arrange for his safety among the Indians on the following day. This being attended to, there was a sort of armed neutrality during the time the big chief remained with us. In company with a white visitor—a tenderfoot—I met the old fellow at the trader's store. The stranger expressed the idea that Sitting Bull must be a very overrated individual, because his face was so stolid and expressionless. I smiled, whereupon the other sought to convince me of the correctness of his opinion. All I could reply was, that an Indian's face is no open book to be read by every chance observer. The face might be all he considered it, but the eyes told a different story to him who was acquainted with the Indian character. I maintained that Sitting Bull had a special purpose in making this visit, that he did not intend this should become known to the whites, and that time would prove my theory correct.

Old Sitting Bull's face was perfectly impassive—expressionless, in fact; but the bright, acute eyes were taking in everything, and intense earnestness glittered in them. Nothing except dancing and feasting occurred during his visit; but before long, the country was aroused by the ghost dances, and was startled by the tragedy at Wounded Knee. Then it came out that the wily old Indian was endeavoring to enlist our Indians in the ghost-dance craze, and failing in his purpose, did induce them to remain impassive. My opinion of the man proved to be correct.

The Lovable Papooses: Dr. Moody Corroborated

The section of Dr. Moody's article descriptive of Indian children is worth notice. It is in my power to emphasize what he says on the subject, and possibly to bring out his point in even a clearer light. I will quote this passage:

"There is no more kind and indulgent parent than the Indian parent. There is no more obedient and tractable child than the Indian child. I never saw an Indian father correct his child either by word or blow, nor did I ever see an Indian child that merited correction. Obedience with them is a cardinal principle. Here is a lesson that civilized parents would do well to heed."

Never were truer words written. Remove the quotation marks, and the words might be mine. Often we hear the remark that certain unruly children are acting like little savages. The remark is a base slander on the little savage. If the white child would behave like his little red brother, there would be no room for complaint. I will bear witness to the same conditions that the doctor has observed.

As a rule, the Indian parent is not demonstrative, yet, with all their seeming carelessness, they ever have the child's welfare in mind. Touch an Indian child in anger, and see how quickly notice will be taken. Well do I remember when the new Agency teacher, a most exemplary young woman, slapped one of her Indian pupils. Little did she dream of the hornet's nest she had disturbed. Actually, the parents demanded her death; next, this failing, her immediate expulsion from the reservation. Things were finally patched up—how, I never fully understood—but she was permitted to resume her duties. But neither she nor any other ever dared to lay a hand on an Indian child again.

Fortunately, our clerk was a man who had lived years of his life among the Indians—very intimately, it must have been. He had the most wonderful influence over the Indians that I ever saw. He could mold them like putty; and it was through his influence and personal control that the matter was finally adjusted. I never saw or heard tell of an Indian parent who struck a child. A blow was considered degrading. I never heard an Indian parent yell an order to a child, yet in some quiet way implicit obedience was always required and given. Thus gladly I bear witness to the truthfulness of Dr. Moody's words

An Aurora Borealis

I will close this article with a description of a wonderful display of northern lights I once witnessed. The clear atmosphere of the Dakota climate rendered the celestial displays of all kinds a source of pleasurable wonder to anyone interested in such things, and I often found myself studying the heavens when I was out at night. There were more stars visible at all times than I ever saw elsewhere, and they twinkled more than I had ever noticed in other atmospheres. Northern lights were more often seen, and they were much more brilliant than I had ever seen elsewhere.

One night a brother employee called me out of my house to see the display. Never before nor since has such a sight greeted my eyes. The entire circle of the horizon was in motion, and the waves of light rolled and billowed to the zenith, where they seemed to unite into a monstrous rosette of shimmering flame. The general color was a rosy hue, and through these sheets of rosy flame could be seen millions of twinkling stars. It was the grandest, most awe-inspiring sight I have ever seen, and it made one feel utterly insignificant. I stood gazing at the wondrous display until my neck ached from holding my head back so

that I could look upward, and I finally went into the house reluctantly, simply because I was too tired to gaze any longer. It is beyond my power of description to give any intelligent idea of the wondrous beauty of that display. I had never dreamed of the like, and I never expect to witness a repetition.

The General Practitioner as a Gynecologist

Everyday Helps for Routine Work

By GEORGE H. CANDLER, M. D., Chicago, Illinois

IV

Follicular Vulvitis

THE sudoriparous, sebaceous, and mucous glands of the vulva may become inflamed, during pregnancy, from insufficient care of the parts or the presence of irritating discharges. Naturally, also, the follicles may be involved in simple catarrhal or in specific vulvitis. In the latter condition, however, the entire vulval surfaces are affected, and here the treatment for the primary disease meets all requirements.

The symptoms in uncomplicated cases are easily recognized. The parts are covered with small red papules which itch intensely. The mucosa between the follicles is not, as a rule, involved; the nymphæ and prepuce, however, rarely escape. In some instances the inner and outer surfaces are equally affected and the extraction of a hair will cause the appearance of pus.

If the condition has existed several days, the parts are bathed in a mucopurulent secretion and the odor, in uncleanly persons, may be most offensive. If the disorder is allowed to proceed, the urethra becomes involved and intense suffering results. At best the condition is distressing: the parts become hyperesthetic and the pruritus, smarting and stinging are described as "unbearable." Intercourse usually is impossible and urination extremely painful. Not infrequently the woman is unable to secure sleep, the pruritus seemingly increasing as soon as the patient becomes warm in bed. Should the male have access to an affected woman, he is likely to contract a stubborn urethritis. In one or two cases I have seen a marked vaginismus following intercourse.

The Method of Treatment

Treatment, if thorough and instituted early, proves speedily curative, in uncomplicated cases. A folliculitis due to pregnancy or the bathing of the parts in morbid discharges from the vagina or uterus will, however, yield only when the causative condition is removed.

The woman should be restrained from exercising unnecessarily, but it is rarely necessary to confine her to bed. Copious hot antiseptic douches should be ordered three times daily. A mentholated solution of the sulphocarbolates and boric acid has given me satisfaction. It is well to add an ounce of glycerin to each quart of solution. The vaginal antiseptic formula, well known to users of the alkaloids, also serves excellently. Before douching, the affected area should be sponged freely with the foregoing solution, or, otherwise, a mixture of 1 ounce each of liquid thuja and echinacea to 1 pint of water may be applied freely. After the parts are cleansed a gauze pad saturated with euarol or an antiseptic oil (carbenzol, 1 part; olive oil, 2 parts) should be placed in contact with the affected surfaces. Dusting powders may be applied externally.

If inflammation is severe and the nodules are filled with perverted secretion, excise with a sharp bistoury a dozen or so of the most prominent ones and express the contents. Then touch the cavities with a cotton-wrapped toothpick dipped in carbolic acid, and, after one minute, neutralize

with alcohol. Paint the whole area with a solution of silver nitrate (grs. 20 to oz. 1) and apply compresses wrung out of a carbolized solution of magnesium sulphate. As conditions subside, substitute the oily dressing or use equal parts of carbenzol and resin ointment, thoroughly mixed.

Internal medication is important. Thoroughly evacuate the bowels by means of small divided doses of blue mass and soda (or calomel) and podophyllin (aa. gr. 1-6), followed by a laxative saline draught. Order a glass of thin barley water every three hours, and instruct the patient to take with each drink 4 grains of ammonium benzoate in case the urine is alkaline; or an equal amount of the lithium salt if it is hyperacid. Small doses of hyoscyamine relieve pain and pruritus. Echinacea and calcium sulphide control suppuration. In all cases I find it desirable to secure two or even three stools daily. But very little meat should be eaten: fruits and vegetables may be consumed as desired.

Now and again an old-standing case will require excision of the tissues adjacent to the follicle. Under anesthaine or cocaine anesthesia, dissect away the diseased mucosa and nodular mass beneath, control oozing with adrenalin solution and coapt the edges with fine gut or horsehair. Strict asepsis must be observed.

Vulvitis of Diabetics

Not infrequently the existence of diabetes mellitus is first recognized when the physician is asked to prescribe for "a persistent and intolerable itching of the genitals." The patient, moreover, complains bitterly of the smarting and burning following urination. At the present time I have under observation a woman who for weeks was unable to secure more than two hours of sleep each night. Upon examination, the parts were found excoriated in places and elsewhere presented a parchment-like hardness. Several small furuncles existed on the mons and inner surfaces of the thighs. Other signs are a peculiar coppery hue of the region. A dry, corrugated skin also is pathognomonic. Naturally, scratching is indulged in and infection is almost sure to result. The discovery of sugar in the urine makes the diagnosis positive.

To effect a cure it is necessary, of course, to treat the systemic disorder; still, immediate relief of the local condition is insisted upon, and very much can be done to alleviate the patient's distress in a very short time. Absolute cleanliness of the parts evidently is essential. They should be sponged several times daily (always after urination) with warm carbolized epsom-salt solution or, what is better, a mixture containing aqueous extracts of calendula and of hamamelis, in the proportion of 1 ounce of each to a pint of water. The addition of 1 ounce of glycerin is good. At bedtime a creolin douche should be taken. Furthermore, it is well to order a copious enema of warm salt water. Excoriated areas should be painted with silver-nitrate solution (grs. 20 to oz. 1), and the parts smeared freely with a salve of equal parts of mentholated vaseline and carbenzol ointment. A solution of sodium sulphite (oz. 1 to qt. 1) quite often gives immediate relief. Pieces of lint soaked with the solution may be placed between the labia.

In desperate cases a mixture of equal parts of camphor, carbolic acid, and chloral, reduced to fluidity by trituration, may be applied carefully. Use 1 part of the fluid to 2 of liquid petrolatum. Furuncles must be opened and the cavities touched with carbolic acid or iodine tincture. The treatment of the causative diabetes cannot be touched upon here.

Pruritus Vulvae

This condition, so frequently encountered, is unquestionably among the *bêtes noirs* annoying the general practician. In every instance it is necessary to discover the cause, and this sometimes is decidedly a difficult matter. Senile pruritus is particularly rebellious to treatment. Occasionally the habits of an individual require to be changed before a cure can be obtained. Overindulgence in meats, sweets, or greasy or spiced foods may cause pruritus. Lack of cleanliness is quite frequently at the bottom of the trouble; so also constipation (retention of effete matter) is often the underlying cause.

In various diseases of the external genitalia pruritus is a symptom; furthermore, the condition may be due to the presence of parasites—we sometimes find pediculosis pubis in (apparently) quite cleanly and "smart" people. Irritating discharges, as has been stated, will, sooner or later, set up a pruritus, while sometimes fecal or urinary incontinence is responsible. Pruritus vulvæ is not infrequently a feature of the menopause, when it may be due to localized congestion or be purely of nervous origin. Lithemic women frequently present the condition: some are afflicted only in winter, others, however, in the summer months.

In obscure cases free elimination and the exhibition of intestinal antiseptics and antacids, together with copious douches, often proves speedily curative. It will be evident, however, that a very thorough examination of the individual is essential, and in every case the urine should be submitted to a competent pathologist. It must be borne in mind that in the very worst cases the objective symptoms are practically absent. The intensity of the itching of the parts cannot be gauged by the appearance of the tissues, though sooner or later rubbing and scratching will produce excoriations and thus increase the local congestion. Some women whose vulvas present a perfectly normal aspect are driven nearly insane by the itching which begins as soon as they retire. These are the patients, moreover, who most insistently demand relief.

(To be Continued.)

Chronic Nephritis

A Discussion of Chronic Parenchymatous Nephritis and Chronic Interstitial Nephritis

By HENEAGE GIBBES, M. D., C. M., L. R. C. P. (London), McAlester, Oklahoma

EDITORIAL NOTE.—This is the third and final paper of a series which has been prepared by Dr. Gibbes for publication in CLINICAL MEDICINE. *The two earlier articles appeared in the September and October issues of this year.*

I. Chronic Parenchymatous Nephritis

My two previous papers on nephritis treated of acute conditions, while this, the final paper of the series, will deal with chronic disorders of the kidneys; and the first to be considered is chronic parenchymatous nephritis. This is a morbid condition which in many cases could be prevented by care and attention. In a former paper the normal histology of the kidney has been described, and the convoluted tubes have been shown to be the parts which remove the extractives or solids from the blood and pass them into the urinary water, thus forming the urine.

In acute conditions with a favorable termination the parts return to their normal condition, new cells being developed to replace those desquamated, but when from any cause this morbid condition is allowed to pass into the subacute or the chronic state the fibrous connective tissue is affected and new fibrous tissue is formed.

A Brief Histologic Review

It will be necessary to review the normal histology of the organ or at least that part which is concerned in this disease. There is one point which should be kept in mind, namely, that in the kidney, and in fact in all organs of the body, there is only a small amount of fibrous connective tissue, only just enough to form a sustaining tissue for the organ; and, realizing this, it will be evident that an increase of this tissue can take place only by encroaching upon the parenchyma, or the functional parts. There is also another important point to remember, which is, that all fibrous connective tissue when formed under abnormal condition will always contract, as is well

shown in a scar, which when first formed is of a pink color but afterward becomes white. That is, when first formed the cicatrix contains numerous capillary blood-vessels, which give the pink color. As the new scar-tissue contracts it destroys these capillaries, now no longer required, and the scar changes from a pink color to white.

In the preceding paper of this series I have described an acute case of this disease and its termination. But if from any cause, such as erroneous diagnosis or careless treatment, the case does not clear up as it should do, we have an entirely different state. It must not be understood that the two causes given above are the usual or the commonest in this disease; in fact, the majority arise from widely varying, causes, and in some the onset is most insidious.

Physical Conditions Denoting Parenchymatous Nephritis

Be the cause what it may, when we find a case with progressive anemia, albuminuria, ascites, some dyspnea, and defective vision, we have our diagnosis made for us, and what we have to do is to get busy and reduce the symptoms, as we may be sure that the parenchyma of the organ is in a perilous state. But fortunately only a part of the uriniferous vessels are affected. And speaking from the experience gained at numerous autopsies, the conditions I have so often found are these: The kidneys were large, pale in color. On dividing them into two halves by a vertical incision, I have found plainly visible to the naked eye two different conditions in the cortex. On making sections after careful hardening and staining, I have found this state of things existing. Many uriniferous tubules were in the condition described in the last paper as acute parenchymatous nephritis, while others were entirely changed and presented the condition I shall presently describe as that pertaining to chronic interstitial nephritis.

Explanation of the Anatomical Changes Involved

Now for the explanation of this fact. Some years before (it may have been many) this condition set in, this kidney had been attacked by acute parenchymatous nephritis which had been allowed to pass into the subacute or chronic form. After a time the organ had apparently entirely recovered, while, actually, the state of the uriniferous tubules was this: some had recovered entirely, but in others the morbid change had been more severe, and in consequence their functionating power was entirely destroyed and they were represented by fibrous connective tissue.

Now, this might have happened years before the patient became aware that a portion of his urinary apparatus was quite useless so far as function was concerned. But at last he came down with *another* attack of acute parenchymatous nephritis, one which to the physician (who was probably entirely ignorant of the previous attack) did not seem very formidable. Still, the patient died, to the great surprise of the physician, who could not understand, until after the autopsy the state of the kidneys was revealed. It may seem to some that I am laying too much stress on this condition, especially since little is said about it in the textbooks; nevertheless, I have had under my eye so many cases where the condition described has been revealed after death that for years I have been calling it "acute on chronic"; and in my collection of microscopical slides of kidney disease this condition is shown to be a frequent one.

Some of the textbooks speak of chronic parenchymatous nephritis and say it sometimes begins insidiously and affects the connective tissue of the organ. If that is the actual state, it is not truly chronic parenchymatous nephritis, but is a case of interstial nephritis; for, to be parenchymatous, it must affect the parenchyma.

It is my firm opinion, derived from a careful study of many cases, that the term chronic parenchymatous nephritis as applied in the textbooks is made to include many forms in which the parenchyma is not primarily envolved. In some works the statement even is made that the disease is one of the connective tissue of the organ and cannot, therefore, be a parenchymatous nephritis.

II. Chronic Interstitial Nephritis

Coming now to chronic interstitial nephritis, it should be stated that this is a disease of the kidneys that has no acute stage but begins as a chronic lesion of the interstitial tissue, and often comes on so insidiously that it is not recognized until far advanced. I have seen cases not properly diagnosed until after death.

It is a disease of middle age, occurring as a rule after the age of forty. One of the earliest indications is a frequent call to urinate, and the amount passed is progressively increased. On examination, the urine will be found to be pale and of low specific gravity, sometimes as low as 1006. This distinguishes it from the largely increased pale urine of glycosuria, the specific gravity of which is high. Sometimes we may find a little albumin, while at other times there will be none. There is no ascites, but often a little puffiness of the eyelids is observed. In a case of this kind it will be evident that frequent examinations of the urine must be made until a positive diagnosis is reached.

Fully to understand this disease, it must be realized that it is chronic from the beginning. It is called an inflammation, but it is entirely different from the simple inflammation we find in scarlatinal nephritis. In those cases we have something carried through the organ by the blood, and this something possesses sufficient irritative properties to cause the tissues surrounding the blood-vessels to react against it and set up all the conditions of simple inflammation as described in the paper on scarlatinal nephritis.

The Various Forms of Kidney Disorders Classified

It is difficult to understand the peculiar characteristics of these different disorders of the kidney, and this difficulty is certainly increased by the lack of uniformity in the descriptions given in the textbooks. To simplify the matter, I will give a classification derived from a study of the nosology of these diseases and their post-mortem changes.

1. Scarlatinal nephritis is a simple inflammation in which there is inflammatory exudation in both kidneys, and in any part of them as it is caused by something possessed of the power of irritating while passing through the kidney with the blood current.

2. Acute parenchymatous nephritis. This consists in an acute change in the cells of the convoluted tubes. It is called an "inflammation," but it has nothing in common with simple inflammation. The cells are swollen and are thrown off from the basement-membrane within the lumen of the tube, where they undergo a fatty degeneration.

3. Chronic parenchymatous nephritis. This, strictly speaking, is a condition where the acute form has become subacute and the socalled inflammation has extended to the connective tissue around the tubes. There is no doubt that many cases of interstitial nephritis are included in this term, which they should not be, as they belong to the following, the fourth class.

4. Interstitial nephritis, or Bright's disease proper. This is an entirely different condition, one that is never acute, but begins as a chronic change in the blood-vessels and connective tissue throughout the organs. It is an insidious disease, in which the blood-vessels, the heart, and the uriniferous tubules are all affected. I have already pointed out that the amount of fibrous connective tissue in the kidney is very small, only just enough to support the tubes and to carry the blood-vessels. The kidney has a firm capsule which will not allow of expansion.

The Changes in the Kidney

This chronic change in the kidneys has been attributed to many causes, and alcohol has been among the foremost named, but it has been abundantly proved that only a very minute amount of the alcohol taken into the body is excreted by the kidney. It seems that there are cells in the body whose action is altered by the ingestion of certain substances, of which alcohol may be one, and they secrete some toxin which has the power of affecting the connective tissue and causing it to increase. Now, if we remember that the amount of this mechanically supporting tissue is very

small and, further, that when any excess is formed under abnormal influence it invariably contracts, we can readily understand how this newly formed tissue gradually contracts on the tubes and destroys them. This process is slow and insidious, more so in some cases than in others, and it is not universal throughout the kidneys; so we find that, while some tubules are obliterated, others have increased in size and taken on extra work. This is no theory, but the result of actual observation.

The blood-vessels of the kidney (and elsewhere) are also affected by this change. A vital part of a normal artery is its endothelial lining. This consists of a number of flat nucleinated cells, set edge to edge, and cemented together by cement-substance. It is, in fact, an extension of the simple structure of the capillary blood-vessel, and this structure is present all through the arterial system, even to the largest artery.

Counting from within out, an artery presents the following. First is the endothelial lining, and then comes the fenestrated membrane; between these two is a variable amount of fibrous connective tissue. In the smallest arteries the amount is so small that it is hard to make it out. It increases with the size of the artery. It is most important clearly to understand this, as it is this tissue that increases and lessens the caliber of the artery in Bright's disease. Outside the fenestrated membrane is the muscle-coat and outside this the adventitia.

Where the Vascular Change Occurs

The only part we need consider is the intima, that is, the endothelial lining and the fibrous connective tissue between it and the fenestrated membrane. The action of the toxin, whatever it may be, on the fibrous tissue in the kidney is also exerted on the fibrous tissue of the intima. The consequence is a growth of new tissue, which pushes the endothelial lining inward and lessens the caliber of the vessel. As a consequence the heart has to pump the same amount of blood through tubes lessened in size, and this requires more power. This results in hypertrophy of the left side of the heart.

The contraction of the abnormal fibrous tissue in the kidney causes the surface of that organ to become granular or rough, and the further growth of the new fibrous tissue, extending and involving that in the capsule, causes that part to become firmly adherent to the surface of the kidney.

This rough sketch of the pathology may be of some help in giving the physician an idea of what is going on in this most insidious disease. The diagnosis is often very difficult, and oftener still the condition is not suspected. There are certain suspicious symptoms which should cause the physician to make an examination of the urine. Among these are palpitation of the heart, persistent headache, frequent vomiting, impairment of vision, repeated epistaxis, persistent hoarseness, obstinate eczema, itching of the skin. These symptoms should prompt a careful examination, and, if there is then a suspicion of nephritis, a test of the urine should be made at once.

As has been already said, the amount of urine is increased, sometimes to double the usual amount, and the patient complains that he has to get up in the night. It is of a pale-yellow color, often having a pinkish tint and showing slight turbidity.

Hypertrophy of the left ventricle is an almost constant feature, and gives a heaving impulse to the upset beat. Hypertrophy of the left side of the heart often causes distressing palpitation, especially after mental or physical excitement and after taking stimulants, such as coffee, tea or alcohol. It also causes a hard, wiry pulse, which an experienced clinician will readily recognize as that of contracted kidney.

Treatment of Chronic Kidney Disease

There is no medicine known so far that has a curative effect on these diseases of the kidneys. The treatment must be dietetic, and the best diet is milk, as it is nutritious and does not irritate the kidneys; one and a half to two quarts a day should be given, and it is better if well boiled. If the patient cannot take pure milk it

may be mixed with weak tea or coffee or meat broth.

A tepid bath at 95° F., morning and evening, is beneficial, and the patient should remain in it for twelve minutes and great care should be taken that he is not chilled on his way to the bath.

The patient should be put in bed and kept there as long as there is any blood or albumin in the urine.

The room should be warmed and the bed also on his return to it. The same treatment applies to all forms of the disease. Wealthy patients can avail themselves of a change of climate and go to the edge of an African desert, which has been found to be the best climate for this disease.

In many cases buttermilk, when it can be procured in a pure condition, is preferred to ordinary milk and is better borne by a majority of patients with any form of Bright's disease.

It seems hardly necessary to call attention to the vast importance of attending to the elimination, which means keeping the intestinal canal as clean as it is possible to do by the aid of saline laxatives, for it must be remembered that the kidneys are as important as the alimentary canal in these cases.

Referring to what has been said as to the morbid action in the kidney itself, the necessity of attending to the kidney will be at once apparent. With regard to intestinal antisepsis, the matter is more complicated. In the first place no one with the most elementary knowledge of bacteriology will contend that it is possible to render the alimentary canal absolutely sterile. A few simple experiments will show this in such a manner as to convince the most skeptical. But there is a vast difference between attempting to sterilize the canal and destroying the toxins or toxin-forming substances that are doing the mischief. Any careful observer can convince himself of this by using an intestinal antiseptic, such as the sulphocarbolates, which are among the best, and watching carefully the results. He must admit that something has been removed which had a deleterious action on the parts concerned. Many pin their faith on these salts, and from results I have seen, they have a very good action; but I have not yet carried out a sufficient number of examinations to enable me to speak positively as to their value in any or all forms of Bright's disease. I am making a careful tabulation of results and shall report later.

Uremia and Its Treatment

I have left this part of the subject until the end, as it may occur in any form of the disease and therefore applies to all. Uremia is, in fact, an autotoxemia. It has been pointed out that certain cells in the uriniferous tubules remove substances from the blood and pass them into the lumen of the tubes, there to join the urinary water and become the solids of that fluid. If from any cause these extractives are not removed they accumulate in the blood and we have uremia. As has been stated before, to have a healthy action from any part, the nutrition of that part must be healthful and it stands to reason that the nourishing blood, carried to a nerve-center and which is full of effete matter which ought to have been discharged into the urinary water, cannot act as a healthful nutrient fluid.

Uremia may come on suddenly with a convulsive seizure and coma, which may be quickly followed by death, or it may come on slowly with a variety of symptoms, such as obstinate headache and neuralgia, which will yield to treatment. These may be considered prodromata and will put the physician on the alert to see first whether the elimination is good. It must, however, be remembered that there are cases where an attack of uremia comes on suddenly, with a convulsive seizure followed by death.

There are certain changes which point to an attack of uremia and these should be sought for. One is a sudden rise of temperature, and some authorities consider that this occurs in every case where an attack of uremia is pending. These uremic attacks closely resemble other conditions attended by convulsive seizure and coma, and it is always best to make frequent tests for albumin. Cerebral apoplexy may be mistaken for uremic coma, and *vice versa*, the points of distinction being that

the latter generally occurs in patients afflicted with dropsy.

In treating these cases, promptness and thoroughness are essential. If elimination has not been attended to, give small doses of magnesium sulphate. But in uremia the cases must be individualized and each one treated on its merits.

This description and classification of diseases of the kidneys is not intended to be perfect or even "up to date" in many respects. To have taken up the latest views on many points and discussed them would have destroyed the object of these papers, which is to help the general practitioner by enabling him to make a correct diagnosis in cases where he often is all at sea, not knowing the normal histology of the organ or the function of the different parts. I think any man with ordinary perceptive ability can, with a little study, make out that the function of the convoluted tubes is different from that of the glomeruli, and that the object of one is different from that of the other; yet the two combined are required to form the urine. And, then, when I look at the textbooks and see what purports to be a representation of a glomerulus in a case of scarlatinal nephritis, but which would do admirably for a representation of encephaloid carcinoma in a textbook published last year, will it matter whether the general practitioner is told that the urinary water passes from the blood by filtration or by secretion?

Referred Patients

And the Business Relations Arising in Connection With Them

By ARTHUR BOWLES, M. D., Ellsworth, Kansas

BEFORE considering in detail the subject-matter proper of this paper, it will be right to discuss briefly two propositions that have a direct bearing upon the questions involved.

First: It is universally true throughout our country that the average practitioner's income is barely adequate for the support of himself and those dependent upon him. The reasons for the existence of such a condition are beyond the province of this inquiry. Increasing centralization of wealth, high cost of living, and the "trusts" may indirectly be responsible for it. Among the direct causes is increased competition through overproduction of physicians. The increased needs of the physician in the matter of his professional equipment, including the automobile, static machine, and all the refinements of laboratory and office furnishings, things unknown to our predecessors, can almost be called necessities at the present day. Low fees and tardy payments are still actively with us, as of yore.

The second proposition is this: Under present-day conditions, it frequently becomes necessary that the general practitioner refer a patient to another physician for treatment. The reasons for this are patent to the entire profession. Briefly, they are the recognition by a physician that his patient needs diagnostic or therapeutic assistance which he himself is not competent to render, and that there are men within easy reach who, by reason of special equipment, training or ability, can supply the needful service. Consequently he feels it his duty to summon this man in consultation or else take the patient to him.

The Need of the Laboratory and the Consultant

The need of increased refinements, in the way of laboratory diagnosis, has been admirably met by the establishment of clinical laboratories in all of our cities. In any case where the patient is able to pay for the work, the general practitioner may invoke the aid of the laboratory to assist him in clearing up a doubtful point, while at the same time he keeps the case absolutely in his own hands.

In the matter of treatment, however, the conditions are not so ideal, and the physician often is obliged to invoke the aid of an outsider, who thereby becomes a sharer—but rightly no more than a sharer—in any profits that may accrue. But only too often the second physician absolutely displaces the first, taking the case entirely into his own hands, not alone professionally but in a business sense as well.

There is, unfortunately, no way of getting around the fact that referring of cases is unavoidable in the practice of every honest physician, because no single man has the equipment or the ability to care properly for all the cases that come to him in the course of a general practice.

The general practitioner is primarily and specifically a diagnostician and an internist. Of course, he generally dabbles a little in eye, ear, nose and throat work, including performance of paracentesis of the ear-drum, treating ordinary cases of otitis media, inflating the eustachian tubes, caring for the simpler cases of ocular disease and of nasal catarrh, and so on. He may or may not remove polyps, tonsils, adenoids. He is an obstetrician of no mean ability, and generally, to a minor extent, a surgeon.

The Limitations of the General Practitioner

But in all of these directions his ability, technic, and equipment are limited. For instance, he cannot use, nor does he possess, a bronchoscope or a gastroscope, but he knows of a man in a nearby city who is familiar with their use. He encounters a case where he knows such an examination would be useful, and there is only one proper course open to him—he must refer his patient to the man who can render the needed assistance. The same is true of the cystoscope and of ureteral catheterization.

But it is in the department of surgery that the majority of referred cases will occur. It is not only the lack of equipment and undeveloped technic that prevents the physician from assuming the total care of his surgical cases, but the further fact that the required special nursing and hospital facilities can only be found in an institution devoted to that purpose. Hence the doctor without hospital connections frequently is forced to turn over his patient to the surgeon and hospital operating room.

Now, inasmuch as the average doctor needs money to live, there has arisen, as a direct result of the conditions confronting him, the practice of the division of fees, or "fee splitting," as it has rather contemptuously been termed; and it is with this question that I intend to deal.

The Ethics of Fee Splitting

In every referred case there are three people who have rights to be considered: the referrer, i. e., the general practitioner; the referred, otherwise the patient; and the referree, or surgeon—taking the surgical case as the usual type of referred cases. The ideal may be said to have been attained when each of these three interested parties receives from the transaction just and fair treatment, both professionally and in a business sense.

Though much written about in the past few years, this important question has not been thoroughly reviewed impartially from all sides; and I say this deliberately and advisedly.

It is important, because it affects the welfare of the entire profession. It affects directly, in one way or another, the income of every one of us. If the division of fees be wrong, then we must know it, and put a stop to it. If it be right, then it must be recognized and legalized within the profession, and apologies presented to those who have been called grafters and bribers, on account of their having lived up to their convictions in the matter.

To call it wrong, does not by any means make it so. Many articles, some of them lengthy, have been written in denunciation of it, while only a few scattered letters have been printed in its defense. However, the articles against it have been mostly illogical diatribes. The defenders have been weak apologists, writing as though the authors had the idea that they constituted a weak minority and were supporting a lost cause.

As a matter of fact, the practice is general throughout the profession, though the

attempt is made to keep it *sub rosa*. Men denounce it in public while practising it in private. It is inveighed against in the meetings of the county medical societies, but the close observer may see a smile and a wink back of the utterances.

Most of the articles written concerning fee splitting have been, as I said before, denunciatory, and not analytic in character. They have been composed by men who always look from the same side of the fence, and refuse utterly to take even so much as a glance from the other side. It has been assumed as a premise that the condition was and is an unmitigated evil, and a thing to be stamped out.

Yet, to deal logically with the question, it seems to me that the premise must first be proved, and to my knowledge no attempt has been made to do this. The surgeon and physician who are known to have divided the joint fee received for a surgical case have been termed "fee-splitters" and regarded as professional lepers, upon grounds the tenability of which still remains to be proved.

Let Us Be Sincere

Another point: In the investigation of a moot question such as this, it is of the first importance that the articles dealing with it be sincere. Even if not brilliant or scholarly, or even if the conclusion reached be erroneous, better that than that they be unfair and hypocritical. And the latter has often been the case. Many, many times the division of fees has been criticized in the columns of our medical journals, the physician being referred to as a grafter and a bribe-taker and his surgical companion as a bribe-giver, by men who privately pursued the same course they so vigorously railed against. And because this has been so, and because the bulk of the general practitioners throughout the country know that it is so, the whole matter has become ridiculous, and has not been treated with the consideration due it.

The physician reads an article condemning the "split-fee," and laughs, because he himself, perhaps, has received from the writer of it a fee collected from a surgical case referred to the writer by himself.

In the first years of my practice, shortly after I had been graduated from medical college, I was located in a little hamlet. I had occasion to take a surgical case to a man of high reputation and of great ability in a nearby metropolis. It was the first case I had referred to him. He looked the case over with me at the hospital, agreed with the diagnosis, fixed the time for operation, and we drove away together.

Said he: "Now, doctor, I don't pay a commission for surgical cases; it looks too much like trafficking in patients. But, I am willing to make a charge for you to repay you for your trip and trouble. I will charge the patient one hundred dollars and make a charge of twenty-five dollars for you."

I said, "Thank you, doctor; that will be satisfactory to me." And it was so.

But why this beating about the bush? How much better had he said: "I will collect the entire fee, because it is easier for me to make the charge, and will give you twenty percent, for you are entitled to that much."

That man is not crooked, he is not a grafter. He is an able surgeon and a conscientious man. I later came to know him well, and did a great deal of work with him, and today I respect him and his ability almost above all others I have known or seen. That is how the matter appeared at the time, to me at least; not as a wrongful act, but as a foolish and unnecessary evasion; and I am sure that is the way nine out of ten average physicians would regard it.

Can the Matter Be Equitably Adjusted?

But to get back to our original discussion. How can the matter be settled so that all concerned receive the greatest professional and business consideration?

Let us consider the matter, first, from the standpoint of the general practitioner, the man who refers the case—the local doctor. What are the relations that should exist in a business and professional sense between him and his patient, on the one hand, and the surgeon to whom he refers his patient, on the other? This last sentence contains two words that merit a passing consideration.

I alluded to the referred patient as "his" patient. Of course, the proprietary interest that any physician holds in any one of the patients under his care is always a rather uncertain item. It is so of necessity, because founded upon an uncertain basis, the constancy of a sick human being—his patient—and a worried and often doubtful aggregation of that patient's relatives and friends.

Theoretically, the physician can terminate his connection with a given case at any time he sees fit, by voluntarily relinquishing the case; practically, he never does so. Our first preliminary proposition explains why this is so. In a few words, he needs the money. The second party to this unwritten contract, the patient, also is able to terminate the relations at any moment by dismissing his doctor. But, in the event of his not doing so, as long as he remains voluntarily under the care of his original physician, the case, in a professional sense, "belongs" to the latter. No other medical man or surgeon can ethically have a share in the care or profits of the case without the consent of the first man.

Well, then, the doctor has his "case" and must look after it, and is entitled to an adequate recompense for any services he may render. It turns out, let us assume, to be a case requiring surgical intervention. The doctor has made repeated examinations, has had the patient under treatment for some time, and has been charging his regular fees. If the patient visits his office, the charge is, say, one dollar or two dollars, and he does not put down a charge of five or ten dollars simply because the case may eventually turn out to be a surgical one. At last, convinced that an operation is a necessity, the doctor has a talk with his patient, shows him the why and wherefor, and gets his consent.

(*To be continued*)

Medical Reforms and Mexican Troubles

By ROBERT GRAY, M. D., Pichucalco, Chiapas, Mexico

HOMOGENEOUS concert of principle and purpose is incongruous with human nature; and this lamentably so among the medical fraternity, where the weal of suffering humanity calls aloud for harmony and concentric operation.

The great and burning issue of all time is now confronting the pomp and power and indifferent vanity of the medical profession, namely, the tremendous responsibility of helping toward human betterment and elevation; and the August issue of CLINICAL MEDICINE demonstrates the alarming sweeping antagonism provoked by any radical, heroic proposition to prune at the tap-root—in good sooth a somewhat gruesome process of treatment.

It were impossible to launch any method of reform that would pass muster without opposition, or that could be reduced to practical employment without becoming an instrument that would be abused for purposes diametrically contrary to the object of its true purpose.

"The limitation of offspring" most certainly would not be immune from illegitimate employment by unmarried women. But what monstrosities we now have instead! Turn to the last fourteen-year report of the vital statistics of civilized and refined France, and ponder over the five million ovariotomy operations performed on women in that lapse of time; then conjecture, if you can and have the heart, the enormous numbers of such operations performed clandestinely, where the law forbids, and no reports are made. Then concentrate the pensive chamber of your brain on the lugubrious shambles of abortions through the refined medium of scientific medical auxiliary or the brutal ignorance of clumsy barbarity, where gestating life is stifled through the cupidity of shame or the maddening impulse to curtail the increase of an already excessive family.

Which, then, of the various methods of avoiding the responsibility of childbirth is the most criminally culpable? My con-

science would unhesitatingly accept the cast of arresting the process in advance of germination, as I do not believe that any state of circumstances could justify the destruction of the embryo save in the dire extremity of preserving the life of the prospective mother.

There is no preemption on any secret method of evading pregnancy; any scientific physician who is a passable master of chemistry knows all that any specialist or plausible discoverer could teach him. The means that are perfectly harmless cannot be a vital question; the popular verdict for or against the innovation is the pending problem. If public sentiment desires such method to become in vogue, the requisite laws will be enacted.

The Misery of Poverty, Ignorance, and Excessive Fecundity

A ramble amid the slums of London or New York affords peeps behind the scenes of sick life that are an unanswerably eloquent protest against the existence of any such execrable hives of human wretchedness and infamous immorality, indubitably traceable to the excessive production of human misery. The United States waged a war, unparalleled in history, to abolish human slavery in the South, that enthralled the poor children of nature in a most relentless bondage amidst mock freedom and a condition incompatible with true liberty. The state of those emancipated wretches today is a menace to the maintenance of peaceful equilibrium in the country, with no promise of future betterment; vice and disease preying upon them atrociously, so that their progeny steadily declines to ever profounder depths of degradation, and this after nearly half a century of nominal freedom.

Go into the overcrowded tenements, where the bone and sinew of American industry and slavish toil reside, and scrutinize the unfortunate state of excessively large families, beyond whose ability it is to provide the bare necessaries of life—ignoring even ordinary comforts—the young certainly should have to render life tolerable. The but half-suppressed sighs of the nameless anguish of the silent mother is truly pathetic as she toils and stints in her cheerless home—a lot she began in bouyant girlhood, full of happy hopefulness, cheered by young Love's fond dream.

But let us pass on to darker hopelessness, where the outcasts and the insane are enthralled, where petty authority lords it over misery and woe, where not one ray of promising hope illumines their sad lot.

In this world of woe charity abounds and there is philanthropy galore, but still the labor of love, inspired by the impulse of generous hearts, has reared and left the saddest monuments of failures of noble purpose and effort that have disappointed modern civilization, and seemingly only because the execution has ever been in the hands of political riff-raff. The only popular institutions whose mission is the alleviation of suffering and misery that are not yet dominated by heartless unhumanity are Red Cross women and trained nurses; but there is no prison nor insane asylum anywhere immune from that sheer brutality so inimical to the primal object as to defeat any possibility of betterment of the poor inmates.

For these reasons, the best interests of society demand the destruction of the criminal and vicious classes and the eradication of diseases transmissible through the hereditary channel by sterilizing those individuals, besides employing whatever other means may be practicable to keep the propagation of the race within equitable bounds.

The Doctor Must Be the Guide and Teacher

But most of such measures are dependent for their execution upon popular education, so that they may not be put into operation too suddenly and violently. And the medical profession and the public must understand and bear in mind that the only legitimate and practical schoolmaster is the family physician. He is the one to instruct the parents in their duty toward their offspring, and also to inculcate in the plastic minds of the tots, as they grow up to intelligent appreciation, what is best and safe for them, thus instilling into the very fibers of their being ennobling impressions that will live in their souls to the end.

Millions of victims roam the earth in wretched destitution this day, for the reason that they were not schooled in the nursery of home to recognize the perils that would early beset them in the strange and unknown pathways of life, with no timely warning to guide and put them on guard against the quagmires and pitfalls they would meet unawares. Their parents told them nothing; their pastors spoke to them in enigmatical mystery; their preceptors left them in the dark, as to the masked dangers lurking in silent ambush to entrap them. They embarked on the voyage of life, strangers in an unknown world, ignorant of, not their possible, but their almost certain evil destiny.

These are no irrational dreams of a distempered mind grown wild amid the silent umbrage of torrid solitude, but they are startling truths evolved from meditation too intense to be indulged in amid the civilized distractions of populous centers. The weird pathos of loneliness calls up to view the sad portraiture of sick life as it languishes in want and woe in so many haunts of wretchedness or masquerades in gilded disguise that breaks the heart with a goading misery the lips have no power to express—a nameless agony hovering on the brink of suicidal madness.

Such awful sick life, cursing the very ranks of nominal activity, have their source in social and moral error but which prudent propriety might measurably avert. Sheer want and disease are ills inimical to the economy of benignant nature, whose plan and purpose designed for mankind a century as the minimum of healthful life.

Unhappy Strife-Torn Mexico

How sadly mournful is the aspect of the shore of this fair and sunny land, whose genial atmosphere distils the quintessence of discord and anarchy, over whose smiling florescent face the withering blight of revolution, the scourge of grasshoppers and the pestilence of smallpox and pernicious fever chase each other in prodigal wastefulness, while over all are heard the low, ominous distant mutterings of a devastating fraternal war. The intelligent, industrial and commercial element—save the few hoping to profit by office or other emoluments—is experiencing a chill of indifference over their recent frantic enthusiasm for Madero, much of which was superficial, actuated by the seeming certainty of his success, in the latter end of the conflict, as hordes of prisoners released from jails and of laborers influenced to leave their employment augmented his ranks.

Here in this Department, where there was not a company of federal troops, a small party, mostly composed of liberated jailbirds, came from the state of Tabasco, taking horses and other valuables from the plantations and money and goods from the stores and banks, burning all the public records, damaging the community to the extent of several hundred thousand dollars, while recruiting from jails and plantations until this rabble horde numbered a thousand or more. They then went back to Tabasco, where they left a large belt of the state practically in a condition of famine, the revolutionary movement having prevented due planting of crops and grasshoppers having destroyed what little there was growing. At the same time smallpox is decimating the hapless population of the same belts, in addition to which, pernicious fever, closely approximating that of yellow-fever in the United States, now rages in its most virulent form.

It is pitiful to contemplate the masses of this people in their superstitious ignorance, dreaming the sweet, fond hope of freedom—a strange, evasive phantom, which, in the minds of the semisavage element of the peon masses, means the opportunity to act and do without restraint, as the wish may dictate. The middle and upper classes are qualified for liberal republican institutions, but they, unfortunately, are not united. Furthermore, there is a large element saturated with the bandit spirit, all of whom operated under the auspices of the Maderistas, and these exercise a most pernicious influence over the peons, which comprise more than seven-tenths of the Mexican population.

It is now almost a foregone conclusion (at the end of August) that General Reyes will poll a stiff majority of votes at the October elections; in which case the country will

await with bated breath to see whether Madero does not cry "fraud" and raise the standard of revolt, supported by office seekers, bandit spirits and the great peon constituency, that would be almost solid for him, and extremely dangerous, with arms and intelligent guidance. The chief hope of the country, in such contingency, is that the provisional government has the machinery of war and that the army element favors General Reyes; which is true of many of the Madero forces that yet retain their arms; and the further fact, that the United States would view a new Madero revolt with disfavor, may serve as restraining influences to acquiesce in the result of the impending popular election—an election that will probably be fairer than most elections are in the United States. [As our readers, of course, know, Madero was elected.—ED.]

The Tragedy of a Perishing Race

The sick life of Mexico is pathetic, gasping over the tomb of dead and nameless nations, a rapidly perishing nation, or rather race, destined to disappear, as to its primal purity, in less than two centuries, at its present rate of decadence. Although these people are probably the most prolific breeders on earth, yet half the children born perish during childhood or youth, while the masses of the full-grown fall by the wayside in middle life or earlier, so pernicious is the venom of their vices. For all that, the children, as a rule, are healthy and promising till they attain the age when they begin to participate in the vices of eating dirt, smoking strong tobacco, and drinking new rum; this tendency to the suicide of the race being due to the degrading influences following in the wake of the invasion of socalled Christian civilization.

The sick life of the emancipated African race in the United States, of the native enslaved people of Mexico, and that of the teeming human hives of China and Japan (the latter of whom will overflow and swarm, seeking conquests on the shores of the Western World) is the menace, for discord at home surely will invite powerful foreign armadas to set sails for those shores. America indeed needs a strong, robust population, such as some radical internal change must develop or Jovian wisdom may conceive.

The Necessity of Preventing Propagation of the Unfit

As to Dr. Robinson I know nothing personally, nor do I care; albeit I know he says things, mail-clad in invulnerable truth, that will outwear and out-tire his detractors who impotently hurl at him their frothings. It were irrational to presume that he or any other, or a host of others, could conceive and formulate any process that would not be subject to modification to render it practically useful; but this does not imply the absence of the germ of a vital truth proposed. I subscribe for his various journals and buy his books; and I read his writings in other journals, if not always with pleasurable approbation, certainly with the result of profitable instruction. We need scores of men with courage to utter unpleasing truths; for nothing is pleasant that may tend to social betterment and moral elevation, through purifying mediums.

While I would recoil with indignant abhorrence from the violent destruction of criminal and vicious and incurably diseased elements of society, yet I would not hesitate one reluctant moment to blight their chances of propagation by enforced sterilization. I would make mankind sound and respectable by any means not brutal or criminal, and would regulate a superfluity of family membership by such means as no one has as yet suggested but that some bright, studious mind may perchance yet discover.

We recreant brethren of the medical fraternity are the shepherds of the perishing flocks which the church and the law have failed to rescue from the rapine of wolves, and the storm, and the night; and I have the biggest and the most hopeless flock under the care of any American; yet there are beautiful households of healthy people amid both the poor and the wealthy, thus clearly indicating the possibility of humanity's betterment, whose sick life is not the diseases that ravage; for the ills of the flesh are only the consequences of the sick

life that enthralls mankind in so many forms. In the healthful homes of the people around me there abides the ideal of real, glorifying family and social happiness; here you find the fond young woman proudly joyful among her budding flowers of love; this is the land of the divine passion in its most intense earthly reality, this torrid glowing sun above keeping the wholesome harmonies of the heart strung to the highest key.

The Cure of Bunion

By BENJAMIN H. BREAKSTONE, B. S., M. D., Chicago, Illinois

Professor of Clinical Surgery, Bennett Medical College; Attending Surgeon, Jefferson Park Hospital; Member of the Consulting Staff, Cook County Hospital; Consulting Surgeon, Mary Thompson Hospital

EDITORIAL NOTE.—This article continues Dr. Breakstone's exceedingly interesting series in "Everyday Surgery." Every reader of CLINICAL MEDICINE *should read these papers in their entirety.*

OF all the affections of the foot, bunion is both the most painful and the most troublesome. As yet this is also a subject to which the regular profession has not given proper attention. This affection is so common that it seems

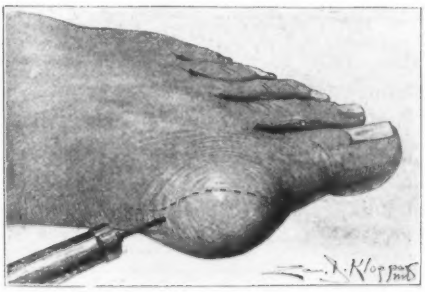


Fig. 1. Anesthetizing the operative field

to me the profession ought to be very much more informed of it, than even of bronchitis, typhoid fever, etc. Our neglect of this subject has put the treatment of this ailment into the hands of more or less ignorant quacks, who, however, are very well informed about this condition, both from theory and experience.

Bunion* is a real exostosis, usually of the inner proximal part of the proximal phalanx of the great toe, with a synovitis of the metatarsophalangeal joint. Normally the line of the inner side of the foot should be direct and continuous to the distal end of the great toe, so that there is quite a little space between the great toe and its next fellow, unlike the spaces between the other toes, which practically come in direct contact with each other. In bunion, however, beginning at the metatarsophalangeal joint, there is an outward deviation from this line, the angle beginning at the joint, and the amount of deviation varying with the size of the bunion, so that there is really a dislocation of that joint, in addition to the exostosis.

The cause of bunion, I need hardly mention, is the wearing of improperly fitting shoes.

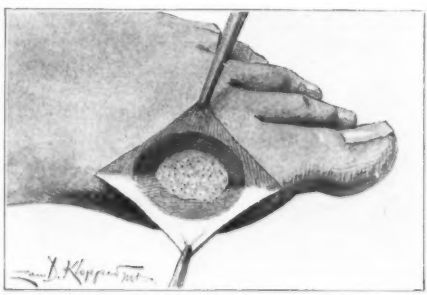


Fig. 2. Laying bare the capsule of the joint

The cure of bunion, it stands to reason, will mean the removal of the pathologic conditions causing the deviation, and the restoration of the normal line of the inner side of the foot. The latter means an osteoplastic operation, which formerly I

*From bunny: O. F., buigne, a swelling. German, fussschwiele; French, oignon. There seems to be no technical term, except the obsolete "tuber verrucosum." "Chronic valgobursitis" might, in a way, describe the condition.—ED.

performed under a general anesthetic, but latterly I have found that it can conveni-

Fig. 3. Division and elevation of the periosteum

ently and satisfactorily be done by the use of a local anesthetic.

There are two methods available for restoring the normal foot line, depending, of course, on the conditions present. If there is not a synovitis present, the exostosis may be simply chiseled off, the dislocation reduced, and the toe brought into line and held there by a plaster-paris cast. The other method is the chiseling out of a wedge-shaped piece of bone from the base of the proximal phalanx of the great toe, the distal end being approximated to the proximal end, and the toe held in line by a plaster cast.

It is usually advisable to combine both methods, that is, to chisel off the exostosis

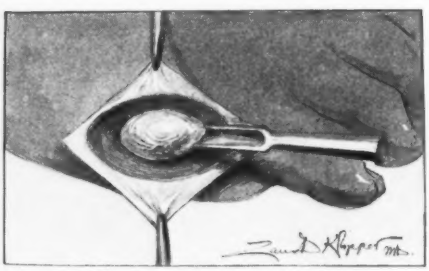


Fig. 4. A wedge-shaped piece of bone is chiseled away

at the base of the great toe, then to take out a wedge-shaped piece transversely, and then bringing the distal end of the toe in line with the proximal end, so that the line of the inner side of the foot is restored to normal and maintained that way by the use of a plaster-paris cast or by splints.

Recently I have been using splints rather than plaster-paris casts, as they are lighter, are easily removed, if necessary, and just as efficient. In former days, when this operation was performed under a general anesthetic, it was, as a matter of course, in the eyes of the patient a formidable one; for all that, these patients suffered so much that they were willing to leave their business and go to a hospital and have this operation done. However, in the ordi-

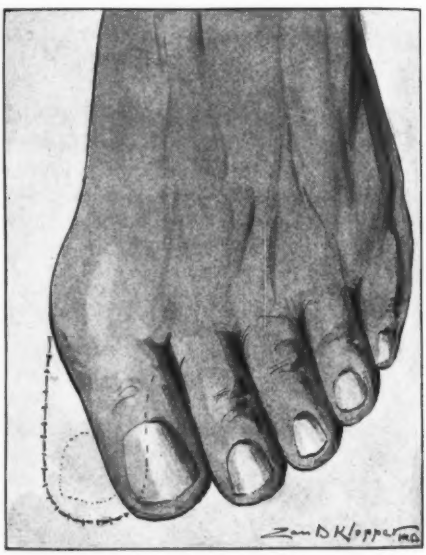


Fig. 5. Indicating the position of the great toe after replacement

nary walks of life this operation may be done at the physician's office, and the patient need lose no time from his occupation; or he may have it done on a Saturday afternoon and go to work on Monday, providing his occupation is not of the strenuous kind requiring great strain upon his feet.

When this operation was first done under local anesthesia in my clinic, I used the plaster-paris cast, fearing the patients would use their feet too much and then again dislocate the toe. However, I have been able to dispense with the cast, except in patients who must do quite a little walking, in which case I still resort to the casts

or to plaster-paris splints. But under ordinary conditions I use wood or fiber splints.

The solution used as the local anesthetic is introduced along the line of incision, which is approximately an inch and a quarter long at the inner side of the great toe at the metatarsophalangeal joint, as shown in Figure 1. The incision is made down to the periosteum and the capsule of the joint (Fig. 2). The periosteum is divided and elevated, and with sharp retractors the incision is held apart and the exostosis chiseled away, as shown in Figure 3. Then the wedge-shaped piece of bone is chiseled away, as shown in Figure 4, and the distal end of the bone brought in contact with it so that a triangular space—the apex being at the base of the toes—remains between the great toe and its neighbor. The periosteum is then sewed up with fine cargut, the rest of the tissues are brought together with silkworm gut, and then a dry dressing is applied. Then, with a wooden splint and adhesive plaster, the toe is fixed, a bandage applied, and the patient walks home. The position of the great toe, after replacement, is shown in Fig. 5. The splint is removed in from three to four weeks, when the patient is told to wear wide shoes in the future.

The wound is dressed as frequently as is necessary. The incision, of course, having been sewed together, the stitches will require removal at the end of ten days.

The instruments required are: knife, scissors, small chisel, mallet, periosteal elevator, tissue forceps, several artery-forceps, needles, and hypodermic syringe.

The Booster's Creed

By HOMER CLARK BENNETT, M. D., Lima, Ohio

1

We believe in the things that we're handing out,
And hand out the things we believe;
We have faith in the God we are talking about,
From whom we our blessings receive.

2

We believe we are able to get the results
When working, not shirking, our task;
We believe that a booster no knocker consults,
And we get what in faith we but ask.

3

We believe it is best to do one deed today,
Than tomorrow to have two things begun,
And the future will find many plans under way,
With hope for much more to be done.

4

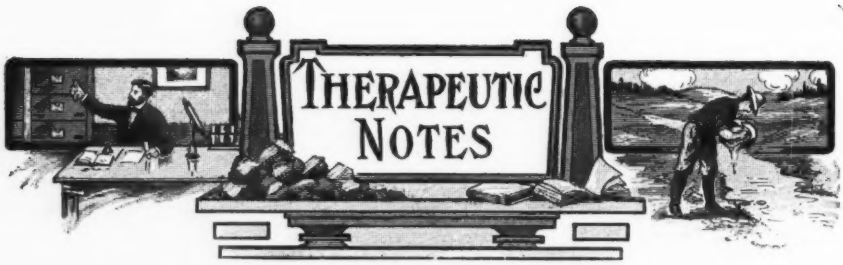
We believe that no person can "down and out" be,
Even though in himself all faith dies;
We believe there is some good in each man we see,
And our job is to help him to rise.

5

We believe that courtesy, kindness and cheer,
With generous friendship and love,
When used in our business, will bring heaven near
And praise from the Master above.

6

We believe there is something for each one to do,
Sometime, some place, and somehow;
We believe we can do it, and we believe, too,
We are ready to do it RIGHT NOW.



PHENOLPHTHALEIN IN THE URINE

Brandeis has found phenolphthalein in the urine of persons taking that substance as a laxative; due to alkalization, the color of the urine was red, as if from blood.

POISONING BY SHOE BLACKING

Rivière reported a case of poisoning, in a boy, by the aniline with which his shoes were dyed. He fell into syncope, the pulse weakened, the skin and mucosa were blue. The urine contained methemoglobin and hematoporphyrin. Recovery was rapid.—*Ann. de Med. et Chir. Infant.*

GUAIACOL CARBONATE AND ARSENIC IN TUBERCULOSIS

A. Jacobi (*Medical Review of Reviews*, June, 1911) treats no case of chronic pulmonary tuberculosis without guaiacol carbonate and arsenic, and says that he is doing well. Nor in chronic pulmonary tuberculosis only. He treats no tuberculosis of bones or of glands without them. In bone inflammations, such as of the vertebræ, fingers or ankles, he has given, since Wegner's experiments and experience of the year 1869, phosphorus besides.

MAGNESIUM SULPHATE IN CHOREA

Rocaz treated four children with grave chorea by subarachnidian injections of magnesium sulphate, securing rapid cures. Having withdrawn 0.10 Cc. of the cephalorachidian fluid, he injected 0.02 Cc. of a 25-percent solution. The action was rapid, the choreic movements ceasing in a few days. The inconveniences were headache and pain in the back and legs. These were lessened or prevented by a precedent injection of atropine. Hemiparesis and torpor were alarming but of no consequence. No renal accidents were observed. Cruchet preferred weaker injections at first: 10-percent strength, gradually increased.—*Ann. de Med. et Chir. Infant.*

CALCIDIN IN VOMITING IN PREGNANCY

A Wisconsin correspondent states that he has been able to secure relief in every case of vomiting in pregnancy through the use of calcidin, of which he gives two grains every two or three hours. This is a simple remedy and every doctor can try it. Let us have the experience of others.

GENERAL PARALYSIS TREATED WITH SODIUM NUCLEINATE

Dr. W. de Holstein, in *Bulletin Médical*, states that there have occasionally occurred cures of this disease, or at least of its symptoms, following prolonged suppuration, with septic fever. Thinking that this cure might be due to the increased leukocytosis, he has been treating these cases with hypodermic injections of sodium nucleinate, using 1-2-dram doses in a 10-percent solution, giving one injection every three or four days.

He has treated twenty-two cases of general paralysis in this way. Of these, 4 were improved, the improvement having continued for nearly two years in one patient, and for nine months in another. Four of the patients subjected to the treatment died. Not one of the control

cases showed any improvement and 8 died. Considering the usually hopeless character of this disease, the showing is an encouraging one.

HYOSCINE-MORPHINE IN OBSTETRICS

The July number of *The Practitioner* has an interesting article on "Hyoscine-Morphine Anesthesia in Obstetric Medicine," by P. L. Giuseppi, M. D., F. R. C. S. Dr. Giuseppi concludes, that "in hyoscine-morphine anesthesia we have an efficient means of controlling pain, and one that is practically safe, when ordinary precautions are taken."

McBRIDE'S "SPECIFIC" FOR DRUG-HABITS

McBride's specific for alcohol and drug habits is the hypodermic injection of atropine and strychnine in gradually increasing doses. By this, he claims to cure these habits in six weeks, without restraint, the cure being permanent; producing a revulsion against alcohol in any form. He confines his efforts to those who wish to be cured. The difficulty in these statements is the common fault of logic—they are not true as to the universal application. All patients can not be cured by a single remedy or method; nor can all cures be permanent.

CURES OF TUBERCULOSIS

An English sanatorium reports 90 percent of cures of patients treated in the early stages of tuberculosis. Of cases partially advanced, 60 percent were earning their living. Of cases out of the institution from four to ten years, 44 percent were alive, in full vigor and health, and thoroughly cured. The patients are treated in the open air and open pavilions at the outset, maintenance costing six dollars a week for each. That is certainly an encouraging report.

ACUTE ANTERIOR POLIOMYELITIS

Leiner and Wiesner (abstract in *Wien. Med. Woch.*, 1910, col. 1897) could show by experiments on monkeys that the virus of poliomyelitis may remain virulent for some time in the spinal cord and that from there it may pass into the regional lymph-glands, whence it is then eliminated through the mucous membranes of the nasopharynx. The intestinal tract and the uropoetic system are not of importance for elimination. The authors believe that the disease must be considered as a purely contagious one and that lifeless objects probably do not play an important role as carriers, because of the slight power of resistance of the virus.

PHYSIOLOGIC OVERTREATMENT

There is not much danger, in these days of therapeutic nihilism, of drug-overtreatment, but there is great danger of overtreatment of other sorts, says the editor of *Therapeutic Medicine* for October, 1910. Just as much, if not more, damage is done through nonmedicinal overtreatment as was ever done with drugs. "What with the taking of temperature, the giving of enemata or irrigations, the administration of food, bathing, etc., every hour, indeed one might truly say every minute, is sometimes utilized and the patient simply persecuted. Charles G. Kerley and Beverley Robinson have both called attention to this error recently and warned us against it."

THE TOOTH-BRUSH LEAGUE

According to the Baltimore *Sun*, one of the results of the establishment of playgrounds in that city is the formation of the Tooth-Brush League. The *Sun* says: "When the playgrounds were opened at the beginning of the season two trained nurses organized the league, and the result is that a thousand youngsters of both sexes, who had not been trained in tooth-brush exercise, have been taught to brush and scrub their teeth until they have become things of beauty, and will be joys to their owners much longer than would have been the case but for this awakened interest. Prizes will be distributed next week among those who have been most successful in the scrubbing operations and can show the whitest teeth. Care of the teeth has been shown recently to be so

intimately related to good health and increased mental and physical efficiency that if the playgrounds movement had accomplished nothing but its successful toothbrush crusade its value would be great."

TREATMENT OF BURNS

Dr. W. R. Ingraham, in *The Scientific American*, says that the most satisfactory remedy he has found for superficial treatment of burns is picric acid, which relieves the pain almost instantly. It may be used in the strength of 1 in 200 (about one-third teaspoonful to a pint of water), or in a saturated solution. It is antiseptic and will prevent suppuration. It stains the cuticle, of course, but the stains will disappear in time. It may be applied on strips of gauze wet with the solution.

In treating deep burns, the physician must be somewhat careful, especially in securing antisepsis. Dr. Ingraham recommends sterilizing the basin in which the solution is to be effected by pouring a little alcohol into it, rolling it about so that every part of the basin is moistened, then igniting it. Then, from the teakettle, pour in water that has been boiled, and add the picric acid; when dissolved, allow to cool. Bandage the burn with clean, aseptic gauze and saturate it with the solution. Blisters should be opened with a sterilized needle and the contents pressed out.

HOME-MADE ASEPTIC GAUZE

Dr. W. R. Ingraham (*Scientific American*) gives the following method for preparing aseptic gauze: Boil, for one-half hour, ordinary cheese-cloth in a solution of common washing soda, using a quarter pound to each five yards of material, adding sufficient water to cover it. Now rinse through several changes of water to remove the soda. This procedure removes all the oil from the fabric and makes it absorbent. After the gauze has been dried, cut it into strips of the desired width and length and sterilize, together with the proposed containers, in the following manner:

At one end of a large breadpan place screw-top jars with caps, into the other end of the pan put the rolled gauze. Place the pan in the oven and bake until the gauze begins to scorch slightly. Now remove the pan and with sterilized forceps transfer the gauze to the jars; and close the latter tightly.

To make bichloride gauze, prepare and pack as just described. Now very carefully prepare a 1 : 1000 solution of mercury bichloride, employing only sterilized vessels. Pour this solution over the gauze in the jars until it is thoroughly saturated, and allow to stand for twenty-four hours. Then pour off the excess liquid and seal the jars air-tight.

CACTIN IN GRAVES'S DISEASE

In an article on Graves's disease, in "International Clinics" (Vol. III, 19th Series), Dr. Solomon Solis-Cohen describes an interesting case of this malady. It was characterized by recurrent headaches, variable in location, but accompanied by stabbing pain referred to the eyeball. The heart was irregular, at times tumultuous, in its action. Systolic pulse tension was low, 100 to 110 millimeters of mercury; the diastolic pressure about 80 millimeters. The sphymographic tracing was very irregular, showing a lack of sustained pressure either in the heart or vessels.

The treatment the author describes as follows: "The patient was put at rest, and cactus administered, in increasing doses, in the form of a solid extract termed by the manufacturer 'cactin.' The tracings which I exhibit show a gradual betterment of the heart's action, slight under rest, marked under drug influence, and now maintained for a month under activity. The pressure is now 125, systolic; 90, diastolic. The patient tells us that her pain has disappeared, and the date of her improvement coincides with the date of the marked change in the sphygmogram."

GLYCERIN AS AN ANTIPHLOGISTIC

L. Burges (*Practitioner*, Aug., 1911) reports several cases of inflammatory swelling in which both the inflammation and the pain were promptly allayed by the

free application of glycerin-soaked cotton covered with a water-proof dressing. The author was led to this use of glycerin by the objection of his patients to the rather considerable cost of the kaolin-glycerin pastes in vogue. He describes several cases of palmar abscess, of carbuncle, mastitis, etc., in which the application of glycerin-soaked dressings produced a prompt retrogression of the pain and the inflammation. The application is simple and certainly is worth trying.

THYROID EXTRACT IN RHEUMATOID ARTHRITIS

Horace Wilson describes, in *The British Medical Journal* for Dec. 3, 1910, two cases of rheumatoid arthritis in which the author was struck by the symptoms, some of which strongly suggested thyroid deficiency. The patients were put upon 5-grain doses of thyroid extract thrice daily, with suitable adjuvant treatment, and the results were remarkable, great progress being made under the treatment. The author thinks the group of cases likely to receive benefit are those in which changes are chiefly confined to the synovial membranes, without erosion of cartilage or eburnation of bone. He suggests the advisability of further observation on the action of thyroid gland in rheumatoid arthritis.

EXPERIENCES WITH SALVARSAN

Out of the innumerable articles upon "606" appearing in the journals, we note one in *The Lancet* that is of especial interest. McIntosh and Fildes detail a number of cases in which this remedy was applied, intramuscularly, subcutaneously, and intravenously. Judging by the number of relapses occurring after the first and second methods, and their absence after the third, the latter is the only proper method of administering this drug.

Their conclusions are: (1) Intravenous injections have fulfilled all that has been claimed for this treatment. [Previously they had said: "Even when applied by the intramuscular method, it has always appeared to us to be a substance more potent in the alleviation of symptoms than, perhaps, any other in medicine."] (2) Forms of application other than the intravenous are relatively unsuitable. Trible and Garrison, of the U. S. Navy, report 240 intravenous administrations of "606," with no resultant untoward symptoms. There were three recurrences, due to timid administration from unwillingness of the patients. In one of the three there was glandular involvement, and the inference is that there the parasites found refuge. A negative Wassermann test was obtained only in 10 percent of cases, the men being returned to duty too soon, the stay in hospital after the second dose averaging only two weeks. This record is published in *The U. S. Naval Medical Bulletin* for July. In the same issue, Dr. Sterne reports a return of symptoms after salvarsan, 0.4 Gram. The symptoms had cleared up, and the Noguchi test was negative. The dose, not repeated, was probably too small.

SILVA'S TREATMENT OF ASTHMA

De Silva's patient was a childless wife, aged 30, with a history of bronchitis, asthma, and hysteria. Seen in an asthmatic paroxysm, she was ordered iodoform, Gram 0.001 (gr. 1-67), daturine 0.0005 (gr. 1-330), and hysocyamine 0.0005 (gr. 1-330), every half hour; brucine 0.0005 (gr. 1-330), and kermes 0.001 (gr. 1-67), every hour. Relief came in four hours. Treatment continued, six granules of each medicament daily, replacing the hyoscyamine by monobromated camphor. By the third day the respiration was normal; but that evening she had a febrile attack, with chills and headache. In that locality such an attack could only be malarial. She was ordered quinine valerate and sulphate 0.003 (gr. 1-20) each every hour; frictions of quinine ointment to the spine, stopping the antiasthmatics while treating the malaria. To remedy the general condition she was given iron arsenate and monobromated camphor 0.009 (gr. 1-7) each during the day; brucine 0.001 (gr. 1-67) and quassin 0.002 (gr. 1-33) before meals; laxative saline when needed; also morning cold baths. The result sur-

passed expectation. Six months later there had been no attack of any sort.

THE HOME TREATMENT OF SIMPLE INJURIES

Dr. Edw. H. Ochsner insists, in *The Oklahoma Medical News-Journal* for January, upon the importance of teaching the layman how to take proper care of trivial injuries, in order to prevent septic infection—which occurs far more frequently than is usually supposed and is all too often responsible for the loss of life or limb or for contractures left after healing.

Dr. Ochsner does not want to seem to be an alarmist and be understood to say that every time a farmer or mechanic gets a small cut or abrasion he must hasten to the doctor and undergo elaborate treatment, for such a contention would be ridiculous. However, if every layman were taught simply how to care for the slighter injuries and if physicians and surgeons were more careful in treating the severer ones, the working and earning capacity of our people as a whole would be greatly enhanced, for we must not forget that the young, vigorous, productive portion of our population is the class that suffers most from these infections and their consequences.

The layman should know two things: first, how to take care of the simple injuries, and, second, that in all extensive superficial and in all penetrating wounds no time should be lost in consulting a thoroughly competent, conscientious and painstaking physician. The layman can take care of the minor injuries satisfactorily by gently squeezing or sucking the wound so as to draw outward, with some fresh blood, any particle of septic material that may have gained entrance. Besides, fresh blood is the best germicide we have, and if the vigorous, active leukocytes can get at the few bacteria that may have gained entrance, they will usually destroy them. If in addition to the above the layman will wash the member carefully with clean soap and water and will apply a freshly laundered cloth over the wound and keep the wound clean for a few days, these smaller wounds will scarcely ever cause any trouble.

Should the part become tender, a wet dressing of equal parts of alcohol and boiled water applied over night will usually relieve the trouble permanently. Witch-hazel and a considerable number of extensively advertised remedies have real virtue, but this is principally dependent upon the alcohol which they contain, and people have been exploited and overcharged for decades because we have not informed them that half alcohol and half water would be just as effective and only one-tenth as expensive. Besides, they would then have been disillusioned as to the supposed almost miraculous potency of these advertised remedies and would not have had undue confidence in them. Undue confidence is worse than complete lack of confidence.

ADMINISTRATION AND ACTION OF THIOSINAMIN

Renon (*Journal des Practiciens*, April 29, 1911) prefers a simple 5-percent solution of thiosinamin to the compounds with sodium salicylate or antipyrin, as being more active. He prepares the solution in the cold, and injects 1 to 2 Cc. (equal to 0.05 to 0.10 Gm. thiosinamin) under the skin of the abdomen. The injections are not painful, and in the course of 5000 administrations he has observed no untoward effects, although he admits that such may occur. Renon also gives the drug internally in cachets containing 0.02 Gram, mixed with milk-sugar.

As regards the action of the drug, the author considers it, on the whole, of secondary importance, capable of rendering certain help in therapeutics, but without giving the brilliant results claimed for it by some writers. Its solvent action on experimental cicatrices in animals is doubtful. In cerebromedullary sclerosing affections, as also in the course of spasmodic paraplegias it occasionally determines a diminution in the contractures and brings relief from pain in cases of tabes. Sometimes it arrests the progressive evolution of chronic rheumatism. In pulmonary emphysema and in pulmonary and pleural sclerosis it dimin-

ishes dyspnea to a noticeable extent. In cardiovascular affections its action is very variable. It is contraindicated in tuberculous patients.

INTRAVENOUS INJECTIONS OF SODIUM BICARBONATE IN DIABETES

Sicard and Salin (*Gaz. des Hop.* 1911, p. 1067) strongly recommend intravenous injections of sodium bicarbonate for the treatment of certain symptoms of diabetes, such as pruritus or various algias.

This treatment is in addition to the regulation dietetic management, but must not be given during or just before an attack of coma. The authors show that intravenous injections of concentrated solutions of the sodium salt are tolerated perfectly well, in fact they employ a 9- or 10-percent solution instead of the customary 1- to 3-percent strength. The sterilized liquid is injected in amounts of 100 to 250 cubic centimeters, and this may be repeated several times at intervals of a few days.

The possibility of giving such massive injections and their harmlessness are of evident interest when in the course of diabetic coma or during the precomatous symptoms it is necessary to act promptly. At the same time the arterial tension must be watched, and must not be increased by the intravenous injection of too large amounts of fluids.

At the meeting, June 24, of the Société de Biologie, Professor Lépine said that the superiority of intravenous injections of sodium bicarbonate, in diabetics in whom coma is imminent, over its oral administration depends, undoubtedly, upon a more perfect penetration of the sodium salt into the cells. It is possible that in diabetics the power of absorption of the digestive tract is greatly impaired. There are patients in whom the subcutaneous injection of iron gives good results, while it fails when taken into the stomach.

ON THE USE OF ACETANILID IN MALARIA

Dr. Robert Gray of Pichucalco, Chiapas, Mexico (*The Therapeutic Record*, July, 1911, p. 149) discusses the value of Ehrlich's work on the dye-stuffs and incidentally breaks a lance in favor of one of the dye-stuff derivatives, the much maligned acetanilid. He says that he breaks the pernicious malarial fevers in 97 cases out of 100, inside of four hours, with acetanilid —a substance that has been under the ban of studied medical journal defamation, and is unused by a large percentage of the American profession. Acetanilid is as innocent as epsom salt, and surpasses all other febrifuges in certainty and rapidity of action.

He continues: "My lamented friend, Dr. Ben H. Brodnax, had patients who swallowed from 100 to 180 grains of acetanilid (whether willfully or accidentally, he was not positive) who experienced no inconvenience after the toxic influence passed. I use it 3 1-2 grains with 1-67 grain strychnine arsenate every half hour, eight times, with male adults; and in dosage according to scientific propriety with women and children. The purple or blue tint under finger-nails, on gums and lips, and, sometimes, in splotches on other parts of the body are the same as they would be were all ingested at once, being the aniline tinge that becomes isolated from the substance and is thus deposited by the blood, the drug being a derivative of aniline, whose color can not be obliterated completely in the manufacturing process; but it is not a cyanosis, as has been erroneously supposed, cyanosis being due to faulty cardiac action of enfeebled patients, with no tinted medication.

"I use the drug only in the febrile stage, employing broken dosage of the quinine properly to avoid recurrences, podophyllin being my eliminant; and I do not average more than three relapses in a hundred treatments.

"Dr. U. S. Boone has had reports from a thousand sanitariums and hospitals, where uncounted thousands of patients had been treated, all successfully, save a very few cases, admittedly due to improper administration, with not one fatality, which justifies my boldness to tell what the substance has done for my practice, as well as increasing my pay 25 percent, simply on

the score of the thousands of dollars it is worth to the owners of these big rubber and cacao plantations to have their men free from fever for more than one to three days, when a man is attacked, now a rare eventuality."

A REPORT ON GELSEMIUM

We reprint the following from the Preliminary Report on Alkaloidal Assays, *Bulletin of the American Pharmaceutical Association*, April, 1911.

"Among the officially nonstandardized drugs which for many decades have been deemed of sufficient importance to merit a place in the Pharmacopeia is gelsemium. That the drug contained an alkaloid, named gelsemine by its discoverer, Kollock, has been known since 1855. This alkaloid was obtained in crystalline form by Maisch in 1869, and was further studied and found to exist in combination with gelseminic acid, an æsculin-like substance, by Wormley in 1870. After that time, gelsemine was considered to be the active principle of gelsemium, until Thompson, in 1887, announced the presence of a second alkaloid, which he named gelseminine.

"Some manufacturers have for years unofficially standardized gelsemium preparations for total alkaloid, and undoubtedly this standardization has been better than none in leading to the production of uniform preparations. In the year 1905, and for several succeeding years, Sayre has studied gelsemium with the object of verifying Thompson's work and obtaining not only gelsemine but gelseminine in pure enough condition for determining their formulæ. His article in the "Proceedings of the American Pharmaceutical Association" for 1908 showed the great difficulty of completely separating the alkaloids and, in fact, his chemical results cast doubt upon the existence of gelseminine, inasmuch as he was able, by treating the socalled gelseminine of Thompson with boiling toluene and alcohol, to separate from it some pure gelsemine. On the other hand, physiologic tests made by Reed at the request of Sayre, on the socalled gelseminine demonstrated that the latter was more than twenty times as active as gelsemine, and that a dose of pure gelsemine hydrochloride ten times as large as the minimum lethal dose of gelseminine hydrochloride on guinea-pigs was without appreciable effect.

"It follows, therefore, that the activity of gelsemium depends primarily upon the socalled 'gelseminine' of Thompson and Sayre, and only secondarily upon the more readily obtained gelsemine, which exists in much larger proportion (about 3 to 1 according to Thompson) in the drug. The real value of an assay for total alkaloids, i. e., the faithfulness with which it represents the real therapeutic activity, depends therefore upon the constancy of the ratio of gelsemine to gelseminine in the drug and its preparations. If this ratio is as nearly constant as that of strychnine to brucine in nux vomica, then the assay for total alkaloids is of unquestionable value, but on the other hand, if it varies considerably, the figure obtained by assay for total alkaloids may be very misleading, since gelseminine appears to be just about as much more active than gelsemine as strychnine is more active than brucine.

"As a means of studying the variability in the ratio of gelsemine to gelseminine in the drug and its preparations, Vanderkleed has studied the problem indirectly by comparing the assays obtained for total alkaloids with the lethal doses on guinea-pigs. His results as given on page 464 of the October, 1910, number of *The American Journal of Pharmacy* show that, whereas the minimum lethal dose of the fluid extract of 0.375 Cc. for a 250 Gm. guinea-pig corresponds quite uniformly with a total alkaloidal content of 0.4 percent, the relationship is quite different in the case of tinctures, where a relatively much greater toxicity (lower minimum lethal dose) in proportion to total alkaloidal content was noted. He concludes, therefore, that the chemical assay for total alkaloid is of little value unless checked up by the physiologic determination of lethal dose.

"It is recommended, therefore, that the chemical standardization of gelsemium be based upon the percentage of gelseminine and not on total alkaloids."

Frontal Insufficiency

A PERSON whose cerebral energy is exhausted reacts on the least annoyance by a burst of anger, by ill humor, by discouragement or by a flood of tears. He looks upon himself as the butt of witchcraft, as being himself, and those like him, the curse of the universe, the blasphemous thing against the supposed cause of all things that exist.

This person has ceased to control himself; his high frontal centers, those, namely, which have their seat most probably in the frontal cerebral lobes, have ceased to exercise their inhibitory action over the ideas, the instincts, the impulses, that is to say, all that which constitutes our ancestral memory, the heritage which we hold from our prehistoric forefathers. This memory is inscribed on the inferior cerebral centers, which centers act instinctively, automatically, in the same way as the reflexes do. These restraining centers (*centres frénateurs*) constitute, in part at least, our acquired memory (*mnême*—from the Greek, *mnême*, i. e., remembrance, memory), the cerebral treasure which we retain from our educators and from our personal experience. These centers think, reflect, and guard the notion of the proper value of ourselves, in order to make it of value at a desired occasion. Activity and exercise may hypertrophy these centers as they do for our muscles or the myocardium. Exercise repeated again and again therefore puts these restraining centers (*centres frénateurs*) in condition the better to hold the reins of emotional reactions, to wit, anger, desire, spite, disillusions, anxieties, depressions, and even pain itself.

In a word, there is an autodomination, an antagonism, between the divers cerebral centers. It is not, therefore, the spirit which dominates the flesh. The frontal lobes, the parts which integrate our self, which are the guardians of high moral sentiments and of our faculty to adapt ourselves to exterior circumstances and to the human acts of our fellow men, dominate (although not always) another part of our self, to wit, the inferior centers. There is a question here about an equilibrium, the conditions of which vary with the individuals. The truth is that only in normal man have the instincts to declare themselves but feebly. In them the restraining centers have, therefore, but little to do in maintaining the necessary equilibrium in the exigencies of life or in social conventionalities. Other people there are who are susceptible, and they have to make great efforts to inhibit the explosions of their ancestral memory (*mnême*). And if these people do not come up to the efforts needed they then get the reputation of being wrathful, impetuous, ruffianly (*goujats*).

Such are the consequences of frontal-lobe insufficiency. This malady is the source of much conflict among human beings. It may decide the fate of an individual and even that of nations. A diplomat whose cerebral reins are not in play may injure the nation he represents and is charged to safeguard.

Alcohol exercises a toxic action on the cerebral cells, and as a type of narcotic poisons, as Claude Bernard proved it to be, alcohol paralyzes them, although not

all of them simultaneously. Alcohol turns first of all against the cells of the superior centers, those, therefore, which according to the evolutionary theory have come last in the animal series. Moderate doses of the poison limit their effects there. Very large doses are necessary to paralyze the subordinate centers, those organs of reaction which are named anger, causeless weeping, gesticulations which rhyme with nothing, words which their authors believe to be spirited, but which really are hackneyed and silly because they were not uttered under the direction of the frontal lobes.

This dissociation of distinct centers by a narcotic is certainly remarkable enough, but there is more. Repeated observations made by the author upon others and upon himself go to show that at ordinary times we have the disposition of a sum of cerebral energy, unfortunately limited and quite fixed in an individual. One sudden and large expenditure, it would seem, ought to be compensated for by a realization of an adequate economy immediately after the expenditure. Yet even in days of intensest struggle and great expenditures all passes off as if the reserves of our cerebral forces had been diverted into the vast sieve of our neurons.

It may be that latent potential energies are liberated afterwards, the same as are liberated the enormous forces dormant in dynamite, by a spark. This might explain the very real necessity of repairing our forces, after a great expenditure of the same, by rest and a generous diet.

But in addition to these repairers we must mention the suppression of all useless losses of cerebral energies, these most precious of all our possessions. This is a thing not at all an easy matter here, and it remains a mere pious wish. We must consider the mighty corroders of our energy, worry, anxieties, and the thousand disagreements which good mother nature has so generously scattered in our path, evidently for the purpose of perfecting our human race by way of selection and survival of the fittest. Let us add further to these factors those sensations which provoke disagreeable sentiments and which thereby destroy cerebral energy. The point is important, because we can do much to remedy it. It is a fact that the association of caffeine and theobromine removes those sensations by facilitating the oxidation of the material in the catabolic changes without which no vital phenomena can be effected. The alkaloids named excite those centers which alcohol paralyses. This action may be indirectly due to a better blood irrigation of the frontal lobes. Be this as it may pharmacodynamically, coffee and its congeners tonify the centers which are characteristic of the moral and civilized person.

They facilitate our existence and communion with our fellowmen. They augment and direct into the right paths our limited cerebral energies. Their value, therefore, is great for those who struggle intensely or who become fatigued by excesses of various kinds or by ailments. They facilitate and shorten in effect the reconstitution of nervous energy, of which energy they regulate the employment.—Dr. Robert Tissot, in *La Dosimetrie*, May, 1911.

TRUE TRIORCHIDISM

Fully established cases of triorchidism are very rare. Generally the supposed extra testicle is merely a cyst of the spermatic cord. This, however, is not true of the case presented, November 3, 1910, to the Belgian Royal Academy of Medicine, by Dr. Leart. After making the diagnosis of cyst of the spermatic cord, Leart became convinced, by a microscopical examination, that the tumor presented an absolutely normal testicular structure.—*Paris Médical*, July 29, 1911.

EXAMINATION FOR ALBUMIN BY ARTIFICIAL LIGHT

It is well known how difficult and uncertain is the examination when the quantity of albumin in urine is very small. Plasencia describes, in the *Revista di Medicina* of Havana (January, 1911), a very simple procedure applicable in this case. He makes use of an ordinary test tube, which

differs only in its color, which is a violet-red. The urine is heated, when the cloudiness is observed far more readily than in the ordinary test tube. The coagulated albuminous particles appear clear, somewhat as under the ultramicroscope.—*Paris Médical*, July 29, 1911.

PERMANENT SOLUTION OF COCAINE

Zulzberger obtains a permanent solution of cocaine by combining 10 parts of the alkaloid with 90 parts of phenylacetate. Such a solution possesses eminent pain-quieting and antiseptic qualities. For dental purposes a solution of parts 10 of cocaine in 50 parts of phenylacetate is best. For the preparation of salves he recommends a mixture of cocaine, adrenalin, and stearic acid phenylester.—*Chem. Ztg.*, 1910. This seems to be a proprietary mixture. Anyhow, there are good local anesthetics whose composition we understand and with which are all familiar.

THE COBRA VENOM INTENSIFIED BY EGG-YOLK

Delezenne and Miss Ledert have established the fact that the cobra poison has the property of liberating from egg-yolk and at its expense, substances which are extremely poisonous to animals. In a mixture like this the toxicity can not be attributed to the original cobra venom, since the mixture of the latter with the egg-yolk requires only a 100th or 10,000th, or even a 20,000th part of the cobra venom to become fatal.—*Paris Médical.*

THE COMBINATION OF DIGITALIS WITH ERGOTIN

Hecht (Germany) treated two cases of hemoptysis from congestion of the lungs in connection with gastrointestinal catarrh with a combination of digitalis with ergotin, after digitalis alone had no effect. The result of the combination was not only a cessation of the hemorrhage, but also a veritable flood of urine, which latter resulted in the disappearance of the dropsy of the legs in a few days. The author believes, contrary to other observers, that ergotin in combination with digitalis not only reduces the blood pressure, but even dilates the blood-vessels. He therefore also recommends the administration of this combination in the cases where the usual diuretics, in combination with digitalis, have no effect.

He prescribes the following pills in recurrent disturbance of the circulation: Standardized digitalis leaves from 1.0 to 2.5; ergotin, 2.5; squill, 3.0; calomel, 0.5. Make 50 pills, of which 2 pills are given three times a day. With these pills Hecht has had good results in a series of cases. The good effect of the ergotin can be explained by assuming that it overcomes the constringent effect of the digitalis on the blood-vessels, especially dilating the smallest renal vessels.—*Therap. d. Gegenwart.*

THE MAMMOTH

The mammoth was regarded as the progenitor of the present-day elephant, and the theory of descent was supposed to be evidenced by it. This evidence has been rendered questionable by Prof. W. Salewsky of St. Petersburg, who delivered a discourse before the Sixth International Congress of Zoologists, held at Bern, the lecturer discussing the results of the scientific examination of the completely preserved mammoth which Dr. Otto Herz discovered in Siberia in the year 1901.

Our knowledge of the mammoth was essentially enlarged by the examinations which several Russian savants have made of this specimen. Thus we now know to a certainty that that creature was considerably larger than the elephants of the present time. It has been found that it had only four toes, which shows that the mammoth belonged to a branch of the elephant tribe which became extinct when this one died. The lecturer exhibited pieces of stomach musculature in which even blood-vessels and nerves could be traced out, desiccated brain and blood, and pieces of skin with bristles, wool, and stiff hairs. The dark-gray skin in the dried state is two and one-half times as thick as the skin of the present elephant and looks

as though it were tanned. The blood, that is perhaps ten thousand years old, gives the socalled biologic reaction with the blood of the present Indian elephant, thus proving the mammoth to have been a blood-relation.

Between the teeth, on the tongue, and in the stomach of the dead mammoth examined were found abundant remains of food, which consisted almost exclusively of grasses even now growing in the places where it was found, showing that the animal fed upon such where it died. With the grasses, some of which could be well determined, there was an admixture of seeds, as well as some single specimens of higher flowering plants, and also of the meadow thyme.

It must have been the cruel hunting down of these giant animals by men mainly that crowded them out of middle Europe, soon after the glacial period, away to Russia, and lastly to northern Siberia, and thus contributed to their final extermination. While formerly scientists contended against the assumption that man was the contemporary and hunter of the mammoth, no doubt is now allowed but that this was really the case. The finds that are made now go to show that the mammoth made a much-desired game for the people of older Europe, whose degree of culture can be demonstrated, as well as for those of the Magdalenian period. It was game, a single one of which, when killed, furnished food of excellent quality for entire hordes for days and weeks. We therefore have to do here with an extinct northern species of the elephant, which proves nothing for the Darwinian hypothesis, a variety that still existed within historic times of man.

Strikingly powerful in that animal was its strongly developed head, which sat on a comparatively short trunk, and which had very small ears, a mighty proboscis and powerful tusks (of about 100 pounds), which turned outwardly and then made a graceful turn inwardly. The hind quarters terminated in a short, pointed tail bearing a bunch of strong bristles. The entire animal possessed a thick, dark-brown, hairy skin, which became lighter in color inwardly until it was almost blond. Beneath the longer bristles hair of 20 centimeters' length there was a thick fur of woolly hair from 5 to 10 centimeters long. From the chin back to the hind legs, covering neck and belly, there was a waving mane, about 50 centimeters in length, like that of the yak, and which must have been an excellent protection against the intense cold.—E. DENNERT, in *Glauben und Wissen*, 1905, p. 104.

LIVERPOOL VIRUS AS A RAT EXTERMINATOR

Liverpool virus is a rat exterminator, the action of which, according to Steffenhagen, depends on bacteria belonging to the Gaertner group. It cannot be distinguished from the bacillus enteritidis Gaertner, either through culture, agglutination or the formation of a complement, and provokes in rats a mortal disease which starts in the bowels. Pure cultures of the bacteria can be grown from the dead animals. It does not seem to affect injuriously domestic animals. In using this preparation, special caution must be exercised, inasmuch as in London at least twelve cases of sickness have occurred which have been traced to an infection with this Liverpool virus.—"Arb. a. d. Kaiserl. Gesundheitsamte," in *Pharm. Zentralh.*, 1911, p. 909.

AMIDOAZOTALUOL, THE ACTIVE INGREDIENT OF THE SCARLET-RED OINTMENT

This ingredient is preferable to scarlet-red, in the ointment made with that dye, because it does not stain so much. Amidoazotulol is a reddish-brown powder soluble in oil, alcohol, and ether. Michaelis of Kassel used it as a dusting powder for sores in the following prescription: Amidoazolotuol, 10.0; zinc perhydrol, 20.0; bismuth subnitrate, 70.0. Apply with a powder-blower over the entire sore and cover with a dry sterilized dressing. The dressing should not remain on longer than three days.—*Med. Klinik*, 1911, No. 4, in *Pharm. Zentralh.*, 1911, p. 909.

Nonsurgical Gallstone Treatment

DOCTOR EVANS of Freeport, N. Y., writes (Sept., p. 994) of his success with liquid petrolatum and atropine in gallstones, and concludes his article as follows: When does gall-duct obstruction become operable? Answer: Whenever a surgeon is at hand. This is not intended as a reflection upon the surgeon, admitting surgery is often best."

Now, the Doctor's query and his own answer to it leads one to believe that in his opinion operative interference is seldom necessary, when, as a matter of fact, very few of the cases treated medically ultimately escape the surgeon if they are to become symptom-free; and one of several things must happen to bring about this happy termination, viz.: First the calculi must pass out and no new ones be formed. Second, they must disintegrate or dissolve and the resulting residue pass out into the intestine. Third, they must become so large by accretion that they no longer become caught in the duct, in their attempted expulsion by the gall-bladder. Fourth, the infection causing their formation must subside or other stones may form.

Taking up the first likely termination, that of passage of the calculi through the duct, we know this is possible, for we have many recorded instances of even large formations found in the stools. But this is not probable, as evidenced by recurring attacks afterward, for usually others remain.

Now as to the possibility of relaxing the ducts sufficiently to allow all stones to pass, I can state only my own experience.

I have repeatedly tried different relaxants, such as chloroform, ether, hyoscyamine, atropine, nitroglycerin, and morphine, without accomplishing such a happy termination, although it may be possible. Recently I had a case of biliary colic in a young woman of 24 years, who had been treated by many physicians and in many ways, without success, for four years. I tried some of the old standbys internally, including a special method devised by Dr. Chas. S. Webb of Bowling Green, Virginia (paper read before the Medical Society of Virginia, Oct. 9, 1906), by which he claimed to have achieved several startling successes in removing great numbers of gallstones.

Dr. Webb's method consists in administering large doses of chloroform and ether in 8 ounces of olive oil, taken in one dose. He depends upon gravity to aid the lubrication of the duct by elevating the hips and making the patient lie on the right side for one hour and then changing to the left side for another hour, this to be followed by a good dose of castor oil. He elutriates and sifts the stools for stones.

However, this method also failed to alleviate the suffering in the case of the young lady mentioned. She finally got an attack that failed to let up even with grain-doses of H-M-C, they recurring after the effects of the morphine subsided. I operated the third day and found a distended gall-bladder containing twelve small stones of only the size of large shot. It certainly might be expected that these smooth, little calculi should have passed under the relaxing influence of the chloro-

form and ether and the lubricating action of olive oil—but they didn't. The patient made a quick recovery, in four weeks the wound had completely healed, and she is entirely symptom-free since. It may be mentioned that I injected sterile olive oil through the drainage tube (until I removed it on the eighth day), to get what local influence the oil might have upon the mucous membrane lining the gall-bladder and duct.

Next as to the second possibility, that of gradually dissolving the stones *in situ*. Many remedies, including sodium succinate, sodium salicylate, piperazin, have been lauded from time to time, but as yet no proof has been shown that such a thing is possible. Perhaps someone will be able to demonstrate, by means of skiagraphs (before and after using a certain remedy), that such a thing is possible, but thus far nothing of the kind has been reported.

In the test tube it is possible to disintegrate the calculi by dissolving out the colloid material, holding the insoluble salts and cholesterin, by means of a weak solution of sodium hypochlorite (antiformin), as reported by Dr. Robt. F. Morris of New York, in the abstract discussion on the papers of Drs. Stanton and Davis in *The Journal of the American Medical Association*, Aug. 5, 1911. This suggestion might prove of value, in practice, in those cases of impacted stones that are overlooked in the cystic or common duct at the time of operation. Possibly they may be disintegrated through the drainage tube, rendering possible their passage through the intestine as sand. Antiformin in capsules might even be tried by mouth; hoping it may find its way into the gall-bladder, by capillary attraction.

The third way in which a patient might become symptom-free or at least free from true colics is that the stones become so large that their expulsion becomes almost impossible through the duct, hence colics are not likely to ensue. This is probably the way some patients become symptom-free, and I have treated quite a few patients, who were relieved by internal treatment, who come under this head, unless they were of those severe cases of inspissated mucous obstruction, where the plugs either passed these or they became liquefied in time and no longer interfered with drainage.

The fourth class of cases, those due to infection, are undoubtedly influenced by internal treatment; but should the process become suppurative, the surgeon again has his inning, unless the internist delays the game too long, in which event the man with the scythe wins the pennant.

In conclusion I will say, Do not temporize too long in these cases, that rightfully belong to the surgeon; Give your patient the benefit of such internal treatment and experimentation; for by this method some ideal treatment may yet be discovered, but after a reasonable time operate, before too much damage to the mucous membrane has ensued.

Also bear in mind the possibility of making morphine habitués of sufferers by too frequent use of the hypodermic needle to relieve the colics. Postoperatives should also be kept under observation and treated, to prevent recurrence of the infection primarily the cause of stone formation.

LUCIUS H. ZEUCH.

Chicago, Ill.

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[The surgeon whose duties lie in applying mechanical remedies to remove mechanical conditions looks on the stone as a point for therapeutic attack. We know, however, that a very large majority of those carrying gallstones never so much as suspect it, the stone being found at autopsies in 10 percent of all persons thus examined. It is not the stone that does harm, but the infective inflammation of the biliary passages that renders them intolerant of the stone is what we should attack.

Dr. Zeuch's error is manifest by his ranking sodium succinate as a remedy to dissolve the stone. This is neither essential nor certainly possible. The succinate dissipates the symptoms and cures the inflammation, leaving the stone much as a bullet is when encysted in the tissues—undesirable, but quiescent and harmless for the time. Years ago I presented this scheme: Treat the paroxysm with glonoin,

to relax quickly the spasm of the circular muscular fibers of the gall-ducts and release the stone; adding hyoscyamine to increase and prolong the action; and strychnine to energize the longitudinal fibers and hurry the stone along the ducts. Give in doses of gr. 1-250 each, every ten minutes till relief of pain or dryness of the mouth, and if the relief is insufficient add a mere whiff of chloroform.

Recurrence with unabated violence I take to be an indication of the presence of a mechanical condition, like impaction, demanding mechanical relief, and I call in the surgeon. These cases are rare. In minor cases and following the above combination, of late I use dioscorein, 1-6 grain in a little very hot water every ten minutes, and am more disposed to rely on it with every demonstration of its efficacy.

The attack over, the patient is placed on sodium succinate, 5 grains four times a day, and directed to take this for six to twelve months. During this time the paroxysms become less frequent and less severe until they cease. The remedy is continued as long as there is a trace of bile to be found in the urine. For a good many years I have been making myself unpopular with some surgeons, by taking cases they had condemned to operations and curing them by these means. But I am not blaming them any more than I would blame the shoemaker that he could not cut and make a suit of clothes. Each sees what he sees, knows what he knows.—ED.]

DEMENTIA GROUCHITICA

Fortunately the disease named in the title is of very rare occurrence. It never attacks you and me; that it does exist, however, there can be no doubt. Sometimes it attacks members of the medical profession; therefore my remarks will deal with its effects on the individual doctor and upon the profession as a whole.

With respect to semeiology, *dementia grouchitica* is characterized by three sets of symptoms, viz.:

1. *Envy.* The victim is chagrined at what he believes to be the good fortune of his competitor, who perhaps is no more fortunate than he, but smilingly goes on and does things, and so receives favorable comment.

2. *Jealousy.* The person afflicted becomes suspicious that his competitor is taking unfair means, trampling upon his rights, and pirating his business from him. He knows (?) that his competitor is dishonest, incompetent and unworthy. He resolves that he will have nothing more to do with him. Never speaks of him to others, except deridingly.

3. *Hatred.* The victim of *dementia grouchitica* not only detests his neighbor physician, but he concludes that something is wrong with himself; thinks he has been too ethical, too honest; that only the blatant, incompetent, dishonest quack succeeds; that the organized profession is a frame-up to injure the honest doctor; that the independent is equally as inimical to the success of the medical profession; he believes that he should "throw ethics to the dogs." Thus he goes grouchingly on, until he is regarded by the profession and the laity with much the same derision as he himself had looked upon them. He now is in the advanced stage. He forgets that, while other professions may lose their utility in the progress of things, the medical profession is the one indispensable thing. It has come to stay. The religious devotee may forget the priest and the altar; the lover may forget his impassioned vows; the mother may forget her babe after it is born; but "man smitten with pain will not forget to seek relief."

Treatment: There is no medicine known to medical science that will have the slightest influence upon this disease—even the "cup that cheers" will make the grouch more grouchy. Yet this disease is curable; but the remedy must be applied by the victim himself. He must turn himself around and go the other way. He should remember that the medical profession is composed of the best flesh and blood of the land, in this the best country on earth, where so many things are designed and provided for our happiness and comfort; inhabited in most part by very lovely people. As the world grows older,

there is more in it for the comfort and happiness of man. Modern comforts are abundant—people act and look more lovely—each year brings to us more to be enjoyed than its predecessor. He should seek the society of his professional brethren—none better can be found—and the grouch will disappear; discouragements will become fewer, and the world will look brighter and better.

"'Tis the coward who quits to misfortune;
'Tis the knave who changes each day;
'Tis the fool who wins half the battle
And throws all his chances away.
There's little in life but labor
And tomorrow we may find it a dream.
Success is the bride of endeavor
And luck is a meteor's gleam.
The time to succeed is when others,
Discouraged, show traces of tire;
The battle is fought on the home-stretch,
And won 'twixt the flag and the wire."

T. A. STEVENS.

Caney, Kan.

CONDITIONS OF TONGUE AND BUCCAL CAVITY: WHAT MAY BE LEARNED FROM THEM

Glossitis is not frequently encountered in children, but occasionally we find excoriations and patches covered with macerated epithelium which persist without any visible cause. In measles, variola, erysipelas, herpes, pemphigus, and eczema, eruptions may appear on the tongue; later the bullæ or vesicles may ulcerate.

A tongue with a yellow coating on its base indicates hepatic torpidity, and is called by many physicians the "podophyllin tongue."

A dry, glazed tongue usually indicates gastric or enteric disease, although it is also noted in phthisis and wasting disorders. Gastritis, enteritis, peritonitis, and intestinal obstruction present this peculiar dry, glazed tongue.

The "strawberry tongue" is an evidence of scarlatinal infection or of ichthyosis linguæ. (Differentiation is easy, of course.)

A smooth, moist, red tongue generally exists in hyperacidity.

A fissured tongue is seen in diabetes, syphilis, chronic dysentery (with peculiar glazing), and in marked cases of erysipelas.

A red, swollen tongue will be noted in aneurism of the aorta, cretinism, mitral disease, variola, and pemphigus. Glossitis, carcinoma of tongue, and ingestion of irritant poisons will also cause this appearance. Some cancerous patients present a "large red tongue."

A small tongue is seen in bulbar paralysis (the patient may be unable to protrude the tongue or only one side of it), the typhic state, acute peritonitis (red and glazed), enteric fever, chronic gastritis.

A large, pale tongue, showing indentations of teeth, may be seen in anemia, gastric atony, neurasthenia, mucous disease (it is slimy), cancer and ulcer of stomach, relapsing fever, and chronic gastritis in anemic, neurasthenic patients.

A dry, furred tongue is present in ague, dyspepsia, continued fevers, the exanthemata, erysipelas, jaundice, pyemia, pneumonia, typhus, acute tuberculosis, endocarditis, lead poisoning, remittent fever.

White fur is more or less marked in alcoholism, apoplexy, hepatic disease (catarrh, gastric, biliary or enteric), colitis, constipation, erysipelas, enteric fever (down the center, and early), measles, meningitis, rheumatism, acute pneumonia, lithemia, quinsy, gout, phthisis, relapsing fever, gastric irritation, migraine.

A brown fur is seen in severe erysipelas, third week of typhoid fever, gout, gastritis, remittent fever, jaundice, septicemia, scurvy, strangulated hernia, typhus, typhoid condition, acute tuberculosis. Any dirty tongue may assume a brown tint from coffee, cocoa, licorice, etc.

Ulcers on the tongue may mean aphthæ, chancre, gastritis, epithelioma or a rough tooth; secondary and tertiary syphilis cause patches and ulcers. Ulcers on the under side of the tongue suggest sprue.

Nodules point to actinomycosis.

A bitten tongue leads us to suspect epilepsy or hysteroepilepsy (not hysteria); a fall may cause the tongue to be severely bitten.

The tongue trembles in alcoholism, bromism, chorea, bulbar paralysis, delirium tremens, paralysis (general), disseminated sclerosis, the typhoid condition, and often just before death.

[The foregoing is reproduced from that excellent little book, by Dr. G. H. Candler, on "Everyday Diseases of Children." The portion here quoted is of unusual value to the busy family doctor, deserving to be closely scrutinized and the facts stored away in a memory's niche for future—and frequent—reference; for here Dr. Candler has collated and grouped concisely and succinctly all the salient facts connected with the more frequent lesions observed in the buccal cavity as valuable diagnostic factors. There is danger that among the younger generation of the guild these and similar diagnostic helps in the treatment of disease are being slighted and forgotten—to the detriment of the patient and the prejudice of the profession.—ED.]

A SIMPLE SUSPENSION APPARATUS

I read Dr. Morrison's article on "Cervical Luxations" with interest, and as he asked the question, "What can I do on an Indian reservation with such a case?" I am going to answer briefly what I believe will not only be a great help in his case, but will help every other doctor, if he will but use it.

You, Mr. Editor, and every other person who does work that requires much stooping can also come in on this little trick. I never told it before, because it is just a little matter of routine I use in many cases, and on myself.

It is just a simple suspension apparatus made like Sayre's, only the arm-pieces are left off.

As the editor has pointed out, there is lack, in this case, of lime, magnesium, sulphur, phosphorus, and iron in the blood, which makes the ligaments very lax. (Dr. Robinson's idea of too much child-bearing for the vital powers to fulfil.)

The best way to help ligaments is to feed them and give them work. Suspend her by the head daily, and while the neck is on tension, work the muscles with the hands. Have her get an apparatus to use at home and trice herself up several times daily. At first pull just enough to lift the pressure off the head, then gradually increase the pull till the body swings clear of the floor. It will not be many weeks till she will get real pleasure out of this, and ere long she will not fear the luxation.

This apparatus should be in every home as there is nothing except sleep that will so rest the tired nerves as well as this practice. I have treated many cases of spinal curvature in this way also, and good results always follow.

For myself, after a backachy job or long bending over a desk, writing, or nervousness, a little swing brings back new force. Just tie a loop in the rope and draw up till on tiptoe and then throw the knot over the door-knob and swing as if in an ordinary swing.

Even old cases of hunchback can be much improved. I took the daughter of Mrs. E., of San Diego, 14 years of age, so badly crippled that the ears were on a level with the shoulders and in seven months' daily suspension and percussion up and down the spine the curvature was reduced enough to make her one and one-half inches taller and in such good form that by proper clothing she looked very well indeed. She became so strong in those muscles that she not only bore her own weight hung by the head, but my own in addition. I would draw her up five feet, clear of the floor, give the rope to her mother, take hold of her feet and gradually add my own weight.

F. G. DE STONE.

San Francisco, Cal.

[We sent a copy of Dr. De Stone's interesting article to Dr. Morrison and asked him to comment, which he did, as follows:

"Whenever the intervertebral cartilages are compressed, the stretching treatment is of the greatest value, and nothing else can take its place. It restores the resilience which has been lost. If the ligaments are abnormally contracted, they also are restored to their normal condition. This, I think, is all it does. It cannot contract relaxed ligaments either primarily or secondarily. I used the suspension on myself twice a day, as a control, when I was testing it. My patients were greatly benefited, but I got no effect of any kind in my own case. I think the benefit in Dr. De Stone's case

is entirely attributable to the relief of compression of the anterior aspects of the dorsal discs, and not to any influence on the ligaments.

"Dr. De Stone increased the height of one of his patients one and one-half inches. This is hardly compatible with a contracting effect on the ligaments. His actual experience with the treatment is evidently the same as my own. The effect of stretching is always stretching, never the reverse. But I am afraid Dr. De Stone is a little inclined to generalize too widely on the basis of insufficient data.

"My goiter patient is very tall and slim. There is no sign of compression or contraction anywhere along the spine, rather the reverse in the cervical region. I never tried the stretching on her, because I did not wish to make a bad matter worse. I first 'set her neck' at the time that I was stretching several cases of curvature of different kinds. I do not see how any rational man could see her case and compare it with those, and imagine that the same treatment would be desirable for all; but if Dr. De Stone, or anyone else, can produce an actual case of stretching, producing contraction in a ligament, I will modify my views. At present I am decidedly 'from Missouri' on that point."

The suspension treatment appeals to us as being of undoubted value in many cases. We should be glad to hear from those who have had experience with it.—ED.]

DAY AND NIGHT

DAY

The Day is ours. We love the busy restless day;
It holds our meed of joy, our hours of work and play;
And yet the day is full of noise and garish light,
Indexing all too clearly to our human sight
The walls of difference men build about their lives,
The bitter want and cruel greed that ever drives
And follows men along the pathway of the lust
For gain—where souls are bartered for a bit of dust.
The peasant's hut, when in the light of day 'tis seen
Beside the palace of the king, looks poor and mean.
The day is full of toil and evening shadows close
About a weary world that's hungry for repose.
The day is doomed—no dawn, however bright
But treads the path of yesterday unto the night.

NIGHT

The Night is God's. He spreads the darkness, calm and blest,
About his weary children like a robe of rest;
The garb of wealth, the cloak of rags is laid aside,
And in the quiet night there is no voice of pride.
The darkness folds with equal love the humble home
And the proud palace, with its lofty tow'r and dome.
The night is full of peace, and rest, and folded wings,
And the soft breathings of a thousand sleeping things;
And o'er the slumbering world a host of kindly eyes
Are looking down through countless windows in the skies;
The darkness cradles faith, and through its hours of rest,
We feel tomorrow pulsing in the midnight's breast.
For night is pregnant with the promise of the dawn,
And darkest hours break ever into glorious morn.

—FRANCIS MCKINNON MORTON.

San Antonio, Tex.

[Written by a doctor's wife.—ED.]

DRINKING WATER WITH MEALS. CALCIUM FOR WARTS

After having read the article, entitled "Drinking Water with Meals," in the October issue (p. 1027), I thought it would not be amiss to contribute my observation in regard to this question in two recent cases, which strikingly seem to contradict the proving there represented.

One is the case of a man past 54 years of age, who habitually drinks large quantities of water, taking invariably two or three glasses at dinner and at least one at supper, besides his coffee at breakfast, of course, and tea at supper. He is of spare build, a good eater and a fair consumer of meat, is of nervous temperament, lively, but does not exercise much. He has suffered for years all kinds of ailments: headache, chronic constipation (not of late), throat and nose troubles, nervous disorders, febrile diseases, etc.

Recently he complained of too frequent calls for urination, being compelled to rise several times at night, but felt nothing special except a sensation of dizziness and lassitude. I advised a uranalysis and found the following:

Amount in twenty-four hours: 2375 Grams, of straw-color, clear, 14° acidity, specific gravity 1010, urea 16.625 Grams, no albumin, no glucose (of course), no indican. He went to Kansas City to consult a "specialist," who also made a uranalysis (?) of a sample passed at the time, and declared his urine normal (I have read the letter), and his condition a nervous affection.

The other case is that of a man of 71 years, of average build, who formerly led a pretty active life, but for some years does not do heavy work, though never idle. He has not been sick since 1876 (pneumonia), hardly ever had headache, never was constipated for more than a few days at a time, and this very seldom. He is a light eater, eats but twice a day and very little meat. For many years he does not drink any water at all, except during the hot summer months occasionally a glass once or twice a day, and never with meals. At dinner he regularly takes half a glass of cider or wine, which he consumes by soaking bread in it after the meal is finished, and in place of these, at the proper season (as now), a glass of freshly expressed apple juice (sweet cider) when occasion offers, in the same manner. He drinks a cup of coffee at breakfast, sometimes another at nine, and usually one at 2 o'clock; eats an apple or two before going to bed. Once or twice a week he drinks a glass or two of buttermilk in the late afternoon.

A few days ago he observed a noticeable increase in the amount of his urine, which was almost colorless, but has nothing whatever to complain of, except that for some time he suffers with a weak back, which makes it difficult and even painful to rise from a sitting or stooping position, this remaining after a severe cold and an attack of lumbago at a sudden change of weather and temperature a few weeks ago. He had his urine examined, and the following was the finding from some passed three hours after dinner! Clear, almost colorless, of 10° acidity, specific gravity 1006, urea 0.006, no albumin, no indican. Two days later another examination showed: amount in twenty-four hours 1400 Grams, clear, yellow, neutral reaction, specific gravity 1.016, urea 11.2 Grams, total solids 52.36 Grams, no albumin, no indican—a perfectly normal urine.

This man has taken no medicine whatever, neither now nor for years past.

Although I do not consider these observations of any practical value whatever, I could not abstain from reporting them, because they seem so diametrically in opposition to the claims and provings of Dr. Niles as reported in the above-cited article.

Concerning the action of the calcium salts (page 1077), I will report, that a lady came to me, April 2, whose hands up to the wrists were literally covered with warts of all sizes, some as large as a nickel coin and one-eighth inch thick; and several of these large ones just over the joints of the fingers and knuckles, which of course caused her a great deal of trouble.

I gave her calcium lactophosphate, 1-2 grain to be taken three times daily, and a saturated solution of epsom salt for local use. The latter was continued until August 1, when I gave her a little dermal solvent and a glass rod, showing her how to apply it to the large horny warts. Besides this, I gave her 1-2 ounce specific medicine of thuja, of which she was ordered to take 2 drops in water twice a day, continuing the calcium salt also. By carelessness in the application of the dermal solvent she managed to get a few very sore places. Two weeks ago she presented herself again with not a single wart, neither large nor small, anywhere; but a few slight scars where the solvent had produced the sores.

BROTHER COSMAS, O. S. B.

Conception, Mo.

DRINKING AT MEALS

I notice that C. C. Fowler and P. B. Hawk, professors of physiological chemistry at the University of Illinois, after repeated tests have come out strongly in favor of water drinking at meals, claiming that at least a quart of water should be added to the customary amount taken with meals if you wish to derive the maximum efficiency from the food.

From time immemorial the opinion of the medical profession has been strongly antagonistic to the taking of water with meals. The argument has been that water taken in this way dilutes the digestive juices and therefore lowers the efficiency of the latter. But the experiments made by the two physicians named seem to indicate that consuming large quantities of water with meals is most beneficial, from the standpoint of health.

I have always held to the belief that before the food can be assimilated it must, in some way, be liquefied, and that the addition of water to the meal facilitates the process and thus has a tendency to prevent fermentation, that prolific cause of auto-intoxication, and which, in turn, results in acid-indigestion, the *bête noir* of the profession—the *fons et origo* of such a large proportion of disorders we have to contend with. I have as yet never advised a patient to bar water from his meals, although he is cautioned not to wash down the food with the fluids.

JAMES STANTON.

Rexford, Kan.

FOREIGN BODY IN THE EAR

Among the many "short stops" appearing in CLINICAL MEDICINE from time to time, I offer the following additional one.

As is well known, every now and then someone is unfortunate enough to have some objectionable foreign body penetrate the ear, which can ordinarily be removed with forceps or a hook; but if the offending object is an insect, its removal is many times a difficult matter. The writer on one occasion, when driving in the country, had a rose-bug enter his ear, and instead of working its way out, it went in farther and farther, and the pain was most excruciating. He stopped at a farm house and called for sweet oil or castor oil, but none was at hand. He then asked someone to melt some lard in a spoon and pour it into his ear, which being done, the rose-bug backed out "instanter," to the great relief of

MEDICUS.

——, Connecticut.

[Even flooding the ear with warm water will usually float out his offending bugship.—ED.]

"WATER WITH MEALS." COWHAGE

When I became the resident physician of an orphans' home I found that the children were drinking freely of milk, water, and coffee with meals. There was little attempt at mastication, the food being washed down. Indigestion was common and decayed teeth were the rule. For several years we have enforced a rule prohibiting coffee and serving milk or water *ad libitum* at the close of meals. The results have been good. For the year ending August 31, 1911, about one-fourth of the long-resident children had no dental caries, and one-fourth had but one cavity. Indigestion, except during the green-fruit season, is not common.

If your editorial leads people to drink freely with meals, at the expense of careful mastication, you will have done more harm than good.

Cowhage.—The night of August 31 a man rushed into my room and begged relief from a most intolerable itching and burning of the skin. I found him covered with a red eruption, characterized by slightly elevated spots. His suffering was intense, necessitating hyoscine-morphine and cactin. This combination of drugs, together with free washing with carbolized water, gave relief. I made a provisional diagnosis of urticaria. Later a strange-looking powder was found in the man's bed and on some clothing. This I was able to identify as cowhage. An enemy of my patient had secured the drug from Cleveland, Ohio, and with malice aforethought (so he confessed) had placed the drug in the bed and on the clothing. My diagnosis was erroneous, but I learned a new use for cowhage.

Galactenzyme.—A man ninety years old to whom a patient gave some tablets of galactenzyme declares it is a Godsend. Through its use he has been relieved of intestinal fermentation, which was making life not worth living.

———.

——, Ohio.

[We presented Dr. Niles' and Dr. Hawk's experiments concerning drinking water with meals simply for what they were worth—without endorsement. However, the evidence which the latter and his co-workers submit is exceedingly strong. Apparently the free use of water at meal times activates gastric digestion, diminishes intestinal pu-

trefaction and increases the functional activity of the pancreas. (See the Therapeutic Notes department in this issue.)

Of course Dr. Hawk does not teach the indiscriminate drinking of unlimited quantities of water at meal time. A reference to the editorial will show that "moderate" and "copious" are the terms used, and the limit placed between 500 and 1000 Cc.—a quart as the maximum. Careful mastication should be insisted upon, no matter how much water is taken. Undoubtedly the Doctor's suggestion, that the fluid should be taken *immediately after* eating, is a good one. This should prevent the "washing down" of food.

Many a "mean trick" has been played with cowhage, though (fortunately for some of us, perhaps) it is little known on this side of the "big water."

Galactenzyme is making many friends—and it should. It's a fine thing.

We apologize to the author of this paper for publishing it unsigned. It was copied, and through an oversight the name was not appended. If the doctor will write us we will print the authorship next month.—ED.]

PNEUMONIA: PROFESSOR ELLINGWOOD DISSENTS

I have just read with interest your remarks, on page 1211 of your November issue, on my comment on Dr. Thompson's communication on "The Treatment of Pneumonia." I will restate here my comment on the action of the dosimetric trinity and defervescent compounds, in full:

"There is no doubt that the treatment had all to do with the abortion of the condition, but there are hundreds of our readers who will at once say that, while the above treatment is superior to the usual course adopted, it lacks the strict elements of a rational, *exactly adapted*, course, and that much could have been omitted. There is no need whatever for a physic in these cases, *if there be no constipation*, a laxative may be useful, but not always necessary. They would advise small doses of aconite and veratrum, or either alone, as exactly indicated. Digitalis was certainly not called for on the first day, and *it may retard* the influence of veratrum when that remedy is demanded, *which is shown*, on the second day, by the fact that the pulse-rate was the same. It is usually best to continue the aconite, and wait until the temperature is at least at 100 degrees, before giving strychnine. The patient made most rapid improvement, but in some cases this course would have been improved even by the above suggestions. No two cases can be treated exactly alike."

I say, and I insist, that the course adopted *lacks the strict elements of a rational, exactly adapted course.* There is no invariable general condition in pneumonia, independent of other conditions, except the primary congestion. The exact conditions in each case must be treated with the exact remedies. *Strict individualization of the case* must be made. Your correspondent quotes me as saying, "there is no need whatever for a physic in these cases." I say, as above, "there is no need whatever for a physic in these cases, *if there be no constipation.*" "A laxative may be useful, but it is not always necessary." You say, you "take exceptions to my advice anent the clean-out"—as if I had advocated an unclean intestinal tract. In all my writings I insist positively upon cleanliness of the intestinal tract, the same as cleanliness of the skin, but I fail to see, after retained fecal matter is removed from the intestinal tract and the colon has been flushed antiseptically, how persistence in the use of irritating cathartics is cleansing the tract. I believe in using intestinal antiseptics, and there are none better than the sulphocarbolates. I advocate high and thorough flushing of the colon, but insist on using physics very sparingly, because they not only increase the quantity of fecal matter in the intestine and which must be removed, but they very often stimulate the excretory glands unduly and unnecessarily, and occasionally pathologically.

I have studied your compounds referred to, and I am confident that better results could be obtained from the individual remedies of the triad, in each case, if they were always absolutely and accurately adapted, individually, to the exact conditions.

I have insisted in all my teachings for thirty years (and I cannot now see where the method is in error) upon *waiting until the evidences of heart weakness are present* before heart remedies are given, prescribing aconite or veratrum, as exactly indicated, as sedatives, later giving digitalis or strychnine arsenate (a splendid remedy) precisely *when* they are indicated rather than in giving them with the special sedatives above named *in anticipation* of a probable heart weakness.

You concede in your remarks that an undesirable, pathologic condition is induced by the digitalis that is held in check by the two other remedies, and, on the other hand, that a condition would result, were the two sedatives given together, which the digitalis will prevent.

We endeavor, usually, to secure the exact action desired from an individual remedy, and not to modify the action of one remedy by another to secure a given result. Agents so given are antagonizing each other and the disease-processes at the same time; a double and questionable function. The other direct course is more rational, more reasonable, more simple, and, as clinical results will show, highly effective.

We are all of us trying to learn exact methods in drug application. This cannot be learned by studying *combinations* of drugs; we must study each remedy applied alone, and note its individual influence until we are perfectly familiar with its action. Then, in a given disease presenting precise indications for exact treatment, we select the remedy, not with reference to what *may* occur, but with reference to an *accurate application* of that remedy *to the exact conditions then present.* Generalization must be avoided; individualization is essential.

FINLEY ELLINGWOOD.

Chicago, Ill.

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[We are pleased to have Prof. Ellingwood's countercriticism. Certainly, if we have incorrectly stated his position—and in this case it seems that we have—we want to set our readers right. Naturally we should not advise the use of cathartics as a routine in all pneumonias, whether the bowel be empty or not. Yet, in our opinion, there are comparatively few cases where the purgative is not indicated, and fewer still where its use will do harm. Unfortunately we can not often tell by looking at the tongue, by interrogation of the patient, or even by palpation of the bowel, whether there is accumulation of residue or not. In case of doubt, therefore, to "clean out" is good practice. Not only does the removal of feces, with subsequent sterilization of the intestinal canal, reduce one toxic factor in the disease, but by determining blood to the mesenteric vessels the laxative agent helps to reduce the pulmonic congestion.

As to the second point raised by Prof. Ellingwood, the wisdom of the conjoint use of aconitine or veratrine with digitalin or strychnine, or both, we should perhaps explain again that we do not advise these combinations invariably in all cases of pneumonia. There are cases in which aconitine may be employed alone, and especially is this true in children. Those of our readers who are familiar with Shaller's "Guide" will remember the classic description of the use of this invaluable remedy in this disease—singly. But in a very large percentage of cases there are distinct indications for more than one of these remedies at the same time; and the symptom-complex is the excuse for the synergistic combination, every ingredient of which has its definite purpose. We agree that only indicated remedies should be given, and these *only when they are indicated.*

Prof. Ellingwood's seeming belief that digitalis is generally contraindicated the first day is based, apparently, upon the opinion that the object of the aconitine (or veratrine) is to weaken the heart, and that nothing should be conjointly administered which will interfere with this action. On the contrary, we do not believe that the drug should ever be given to the point of determinable depression; that its real usefulness is in relaxing the toxic spasm of the peripheral vessels, opening them naturally to the flow of blood, while small tonic doses of digitalin are given to overcome the cellular paresis, maintain the heart

and arteries in normal tone, and anticipate the cardiac weakness, which is a characteristic feature of the disease—and the symptom most to be dreaded.

The aconitine, digitalin and strychnine are *not* given to modify one another's action, nor as antagonists, but because each meets a definite indication presented by the disease itself. The two remedies acting together unload the congested lung and provide a natural, undepressed circulatory balance. The strychnine is indicated only when *weakness*—asthenia—develops or is imminent, and is only to be added under such conditions. A careful reading of pages 360-361 in the new edition of "The Text-Book of Alkaloidal Therapeutics" will make all of this clear.

We agree with every word that Dr. Ellingwood says regarding the study of the single drug. Yet, this belief does not make it less imperative, less of a duty, to give more than one drug at a time, *whenever each is indicated unmistakably*. We should give two, five, ten remedies at a time, if each had a definite, proven value in the case in hand.

When Burggraeve introduced the "trinity" he did the medical profession a great service, one that has been justified many times over by the final test of *results*.—ED.]

A HOME FOR THE WIDOWS AND ORPHANS OF PHYSICIANS

A most worthy undertaking, one which should command the sympathy and financial assistance of the readers of CLINICAL MEDICINE, has been undertaken in Baltimore, Md., where a home for the widows and orphans of physicians is being established.

"It is as unfortunate as it is true," to quote *The Bulletin of the Medical and Chirurgical Faculty of Maryland*, "that medical men, as a class, are notoriously underpaid, and that, with their willingness to minister to the needs of others, they often combine a short-sighted improvidence for themselves and those dependent upon them. When death overtakes the physician, too often it happens that his family is left with very inadequate means of support. Desultory provision for such cases is neither safe nor satisfactory, and hence the wisdom of providing a permanent home will appeal strongly to thoughtful persons."

So far as we know, there is no institution of this kind in the world at the present time, yet we are constantly reminded of the destitution of the families of deceased physicians. The doctor is not a money-maker, and too often his dear ones come to want.

About $3000 is still needed to make it possible to open this institution. Surely, among the readers of this journal there must be thousands who can help with at least small sums, and a few who doubtless can and will contribute generously. The president of the Board of Managers is Mrs. Eugene F. Cordell, 257 W. Hoffman St., Baltimore, Md. Mrs. Cordell is the widow of a physician, and understands the need of such a home as this.

USES FOR CALCIUM SULPHIDE

I was somewhat amused in reading Dr. Bristow's letter (page 550, May CLINICAL MEDICINE) in which he wanted to know "what the blazes happened." He is right about "there being very little use to talk about aborting typhoid fever," for that is settled in every up-to-date physician's mind now—with the clean-out and the saturation with calcium sulphide.

If you will turn to your file for September, 1896 (Vol. 3, No. 9, p. 338), you will find an article on aborting typhoid fever, and will see that even at that early date I was using the sulphide, but not in such large dosage as now. Calcium sulphide will reduce the temperature in *all* germ diseases when given to saturation. I used it in smallpox on a mother and let her baby sleep with her, but kept the infant saturated with calcium sulphide for two weeks before vaccinating it; and it never showed any sign of the disease. This was genuine smallpox, for the father and two brothers died under other treatment at the hands of other doctors.

Calcium sulphide is a specific in gonorrhea, causing no bad results. I use it in

whooping-cough, finding that it modifies the disease and that there are no complications. I make it one of three drugs that will cure tuberculosis if taken early. I know this is dangerous ground, but *think a little*, then try, on some patient, calcium sulphide, calx iodata, and nuclein, in connection with *forced* feeding and open-air sleeping—note the results.

Calcium sulphide is both a local and internal antiseptic. That is why you should give it in enlarged glands. The temperature, in the Doctor's case, fell because he removed the cause (destroyed the germs and carried them off by the diarrhea—nature's method of clean-out). Calcium sulphide will cure boils. It will cure erysipelas if carried to saturation and the parts are covered with a good antiseptic powder, to exclude air. Keep away all moisture and you can cure any case. The CLINIC is all right.

G. F. PLOTNER.

W. Mansfield, O.

This may seem like pretty strong doctrine—but don't be in a hurry to condemn it. Try some of these ideas first. By the way, note the similarity in the method of treatment for tuberculosis advocated by Dr. Plotner and that adopted by Dr. W. C. Goodwin of Philadelphia, reference to whose work will be found in the first Miscellaneous article of last month.—ED.

WHY OSTEOPATHISTS SHOULD HAVE A REGULAR MEDICAL EDUCATION

So much has been said, pro and con, about the osteopathic method of treatment that I have been asked to express an opinion on the subject, having taken an osteopathic course myself.

While not wishing to make any remarks which might injure any osteopathic friend of mine, still I cannot refrain from asking a few candid questions.

What reason could a sincere medical man have to oppose osteopathic treatment if it is of the nature as claimed by their school? Not one sincere properly informed medical man is against the practice of rational osteopathy provided the proper safeguards surround it. In fact, they believe in scientifically administered osteopathy and many resort to it when it seems indicated.

However, what physicians are opposed to is the army of utterly incompetent persons who have been licensed to practise under the Osteopathic Practice Acts. These people apply pressure and other manipulations without understanding, sometimes so severe as to injure the patient, while, in their ignorance, practically treating each and every disease alike, ascribing one cause for all; for, not being educated like regular physicians, they are unable to distinguish between different diseases. Otherwise, how could they claim to be able to cure diseases, in their advanced stages, such as typhoid fever, pneumonia, diphtheria, stomach ulcer, otitis media, catarrh, gonorrhea, syphilis, scabies, or stone in the kidney or bladder, internal tumors, cancer, diseased glands, besides many more of such maladies, saying that these are caused by irregular conditions amenable to their manipulations?

Surely, to permit such ignoramuses to practise is not safe-guarding the public, and it stands to reason that the more protection and safety we can place around our methods of treatment, the more the public is benefited. I do not desire to say one word against a sincere osteopath, since many among them are my friends; but in the interest of sick humanity, it is the duty of the medical profession to insist that everyone practising osteopathy should have a full medical education, for altogether too much harm can be inflicted by improper manipulation by ignorant men and women, or by preventing proper medication when it may yet do good.

If, as a class, they have improved now, and have, as they assert, such an excellent and complete course of studies in their institutions—even being, as they say, ahead of medical men—it is certainly easy for their graduates to pass an examination before the medical state boards and secure the regular M. D. license; and thus to be as fully qualified and safe in their work as other medical men are. It seems to me

that no honest osteopathist should object to this demand.

Think of a man hanging out his sign as an osteopath, say about three months before the Osteopathy Bill passed, and thus coming in with the rest and being admitted to practise and manipulate without previous examination, as has been the case in more than one instance. Many such self-styled osteopaths in practice have been known to be unable to name one single muscle in various parts of the body. It seems incredible that such men should venture to take up osteopathy as a method of earning a living. And these people, to cover up their ignorance, will use main strength in their manipulations and thus inflict upon the suffering public more injury than can be told. And yet it is claimed by them that their treatments and manipulations are on the muscles and nerves, and that of necessity they know their anatomy well. How, then, is it that here we find their practicians ignorant of one of their most important studies—anatomy.

It is to be hoped that, by agitating this question, our legislators may take up this matter early and vigorously and enact such provisions as will inure to the highest good of all.

EDWARD L. FINCH.

New York, N. Y.

ON COLLECTING BOOKPLATES

Since our note in a recent number of CLINICAL MEDICINE, to the effect that two members of the staff are interested in Bookplates, or Ex Libris, we have received a number of very pretty specimens and have reciprocated by sending our own. We again thank those of our readers who have remembered us, and want to ask all physicians who own or collect bookplates to send us specimens, assuring them that we shall exchange promptly.

The collecting of bookplates is not an idle pastime, as it might be thought. It presents many points of interest in regard to the conception of the design, the execution of the drawing, the reproduction (either by electrotype, by engraving, by wood-cut, and so forth). It is further interesting to watch the leaning of physicians toward certain conventional designs in bookplates in so far as they do not elect simply to use their armorials.

Some day the writer hopes to get up a little paper on bookplates of physicians, which will be published with illustrations. If you wish to send us specimens, kindly address them to the undersigned, in care of THE AMERICAN JOURNAL OF CLINICAL MEDICINE.

H. J. ACHARD.

Chicago, Ill.

OBSTETRICS AMONG THE INDIANS

I have read a number of articles in different medical journals, in which it was set forth that Indian squaws do not suffer at childbirth, because of their out-of-door life and exercise in the open air; that they just drop their young without any pain or expulsive efforts worth speaking of. While I agree that their mode of living develops muscle, strength, endurance of hardships, yet I am persuaded that there is some mistake about their not suffering.

When our country was yet very new, some sixty years and more ago, the Indians were so plenty in northern Illinois that their customs and mode of living were no secret to the white people. They built their tepees in the woods near the schoolhouse where I attended school, and frequently visited our homes; we divided our dinners with them at the schoolhouse, and went into their wigwams at will, so that their inner life, as well as their outer, was almost an open book to us. Of course, they were almost constantly on the move, seldom stopping in a place more than a few days—sometimes only over night—when they would move on, only soon to be followed by others.

In those days it was thoroughly demonstrated to the settlers living in districts where those tribes of Indians camped that the native women did suffer in bringing forth their young. But there was no groaning, whining or complaint. The poor creatures simply sought some rather secluded spot in the woods, if the weather

was warm, and in place of the obstetrical harness, a log or a stone was found as a brace for their feet, and a limb of a tree or a young sapling to cling to while in the throes of labor. Seldom anyone went near, except occasionally to reconnoiter and mark how things were going. If it became apparent that the poor sufferer were likely to die, then their medicine-men would collect and dance around the woman, using all their varied superstitious charms of cat's claws, snake venom, owl's brains, rattlesnake oil, and like things. But they brought about no change in conditions, only that sometimes the poor tortured subject pulled through in spite of all the odds against her. Then, as in the case of our modern pretenders and cure-all doctors, those hocus-pocus men were given great credit for their doings.

The squaws of those tribes did suffer, and even at times some died, as any strong-built person put together like iron, as they were, is liable to do; however, when the labor was over, it usually was all over. Then it was that their strength and robust make-up, the result of their healthful out-of-door life, served them to good purpose. They could strap the newly-arrived papoose on their back the next day and, mounting their pony, resume the journey with the rest, none the worse, apparently, for the little episode of the day before.

I am not saying that all squaws suffered alike, but a woman of strong, wiry, robust build may go down to the very gates of death, in her expulsive efforts, before there is any yielding of the stubborn parts, while another one of her sex, weak, delicate, loosely built, may scarcely realize she is in labor until she hears the baby cry. In her case, however, recovery is much more gradual and doubtful than in that of the former.

C. M. H. WRIGHT.

Blaine, Ill.

PRONUNCIATION OF "DILATE" FAMILY

It has been one of my life's aims to cultivate pronunciation according to the best usage, but, to my chagrin, this day I discovered that I have been wofully sinning all the time against the honored "dilate" family of medical terminology, in that I gave the "i" the broad sound as in "fine," with the accent on the first syllable. My only consolation is that I have a multitude of brethren in crime against the language, and, so, to bring the others to a realizing sense of their culpability, I will ask them to get down their dusty dictionary and prayerfully look up these words: dilate, dilatated, dilator, dilatation, dilation, dilatant. Then confess, and sin no more.

ADOLF G. VOGELER.

Chicago, Ill.

TRANSMISSION OF DISEASE BY MEANS OF BOOKS

The undersigned is preparing a paper upon "books as a source of disease," to be read before the next "International Congress of Hygiene," and in order to obtain data, respectfully requests the readers of this note to send him an account of any cases the source of which have been traced to books or papers or where the evidence seemed to make books or papers the offender. He would also further request information where illness or possibly even death has been caused by the poisons used in book-making.

All information procurable is wanted, to present as complete a paper as possible. As in the case of insects, which we now know to be "carriers of disease," it is first necessary to collect the scattered evidence in order to show that there is real danger in books; and this will compel better care to be taken of libraries and books, and thus improve the health of mankind.

WM. R. REINICK.

1709 Wallace St., Philadelphia, Pa.

CHIONANTHUS FOR ENLARGED LIVER

With the consent of the editor, I wish to write for CLINICAL MEDICINE a brief account of a case the history of which ought to prove to any doubting Thomas the sureness and certainty of the results to be attained by direct specific medication and faithfulness in attending to "clean-up and keep-clean" treatment.

Some years ago I read in some progressive medical journal that chionanthus is the best preventive of gallstone formation as yet discovered, and from my own experience I would say that the author was correct, and, further, that it is also a very sure and certain remedy for congestion of the liver, "pain in the side," hepatic torpor, and liver insufficiency generally.

About the last of March, 1910, I was called to treat a lady, in her seventieth year, who had been suffering for four or five years from the condition of her liver, which had become greatly enlarged from constant and long-continued congestion, or hyperemia, and which gave her constant, continuous pain. On making a thorough examination, I found that I had to deal with inflammation and enlargement of the liver, inflammation of the right kidney, severe chronic gastritis, and prolapse of the vagina and rectum. The previous medical attendant seemed to have treated her mainly with calomel, for the liver, and with morphine, for the pain. The condition of the liver had probably been made much worse by several attacks of grip she had passed through. The symptom-complex was such as to give a doctor a fine opportunity for study.

The debility of the woman's gastric machinery was so great that I was forced for a long time to keep her on an exclusive diet of malted milk, any attempt to take anything more solid resulting in an enormous amount of gas and a great deal of pain. She had, frequently, very restless and sleepless nights, with great pain in region of right kidney, and partial suppression of urine. After a few hours these symptoms would subside with the passage of a great quantity of pale, colorless urine, causing me to believe that she had a large calculus in the pelvis of the right kidney, which at times acted as a ball-valve to shut off the flow of urine through the right ureter.

On examination, I found that her passages denoted almost complete absence of bile, and I was told they had been that way for months. It seemed to be a case where chionanthus ought to do good, and I proceeded to administer it combined with bryonia and gelsemium, alternated with natural sodium salicylate administered with a good deal of water. She also took regularly the gastrohepatic pills of podophyllin, leptandrin, hydrastis, aloin, capsicum, and gamboge. I also gave specific hyoscyamus, a few doses each evening, for her restless and sleepless condition.

While I found it necessary to change or discontinue some of the other remedies, the chionanthus was continued for days and weeks and months. The response was slow, but wonderfully good when it came. The passages became perfectly black for a time, the right side ceased to pain her, for the first time in years, and her stomach recovered its ability to digest solid food. We have achieved one result in her case that even I, with my perfect faith in specific medication, would not have hoped for—*her liver has gone back to its natural size.* While I felt sure that we could relieve her of her congestion and inflammation, I should not have expected a liver that had been enlarged for several years to return to its natural size. But that is what happened.

WM. M. GREGORY.

Berea, O.

ABDOMINAL SWELLINGS AND TUBAL PREGNANCIES*

In March of this year a woman of this city was suffering from a most peculiar disorder, accompanied at intervals with excruciating pain and other symptoms—interesting enough and worthy of an afternoon's discussion, but not what I intend to talk about this time. This lady was under the care of one of our colleagues, her disability covering a period of about five weeks. I will not go into details; suffice it to say that on two different occasions her own doctor was unable to answer to calls for immediate relief, and one doctor at one time and another doctor at another time responded and administered to her temporary relief. Of course, during this period of five weeks, various diagnoses had been made; various pills, tablets and liquid medicines had been prescribed, her own

*Read at the meeting of the La Porte County (Ind.) Medical Association, May 12, 1911.

doctor being partial to a certain large brown tablet.

On one of these occasions, when the doctor of the brown tablet was unable to respond immediately to a sudden summons, a brother practician hastened to the patient's relief, administered a hypodermic of morphine, gave some small green-coated pills, and departed. After the lady had ingested two of these small green pills, the physician of the brown tablet put in his appearance. By this time the woman was greatly disturbed over the very considerable and startling increase in the circumference of her lower abdomen, and pressed the doctor of the brown tablets for an explanation. The latter told her that the green pills supplied by the other doctor were the cause of that strange abdominal bulging, and admonished her not to take any more of those mischief-makers— scared her so, that she nearly vomited up the one taken but fifteen minutes before.

Now, brother doctors, it certainly is reasonable to suppose that this woman's confidence in doctors and doctors' pills was somewhat shaken by this extraordinary explanation, while in her own mind she must have questioned its correctness. Naturally enough, confidence in her own doctor tottered most of all. No immediate improvement ensuing in her case, the doctor of the brown tablet repeated his calls a few times, left his medicines regularly and gave careful directions as to their use. Needless to say, his pills were not swallowed nor his directions heeded, so that, when he withdrew from the case, the woman didn't care if he never made another call. Perhaps it is fortunate that the doctor of the green pills was not called again, because it is reported that he is singularly careless of the reputation of his brother practicians.

But now, as if that woman's suffering had not been enough, some "faith-healers" suddenly felt called upon to "do the Lord's work," and they came and prayed, to beat the band, for a short season. But that old bellyache stayed right on the job, and so, one night, she made up her mind that she wanted another "pill shooter." Thus it happened that yours truly was sent for.

I wish that I might go into the full details of this interesting case, but I am determined to make my paper as short as possible by bringing out only those facts which I deem essential to the story.

During the course of my examination the woman showed me the wonderful green pills, saying she was curious to know whether they had caused all that swelling, as that other doctor had said. I could not credit her statement; believed that she had misunderstood; questioned closely as to just what the doctor had said and what she understood by his words. She called her daughters as witnesses, so I could no longer doubt that the doctor of the brown tablets did wield a most mighty old hammer.

Similia similibus curantur! Tried, and never found wanting! That well-proved old law to which we may ever turn in times of direst need!

"Madam," said I, "your doctor, when he told you that those green pills caused all that swelling in your belly, just, merely— lied, that's all; for those peculiar symmetrical swellings, which are prone to occur in the lower part of a woman's abdomen have an etiologic factor entirely different from a little green pill—and your doctor knows this, and he knew that he lied when he said that the other fellow's green pills had caused the trouble."

Confidence was restored. It may interest you to know that my old pal, Dr. F. V. Martin, assisted by Doctors Blinks and Synder, performed a very successful operation for tubal pregnancy, and the patient lived to tell the tale. This woman believes, and often so says, that I saved her life. She believes, and often says it, that I am the only absolutely and strictly honest doctor in town, and a diagnostician beyond comparison. No one has ever heard me deny any of these imputations!

Discussion of this paper will be limited to three-minute rounds, under the Marquis of Queensbury rules.

FRANK R. LEEDS.

Michigan City, Ind.

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[This article would not be complete without at least a portion of the letter

from Dr. Leeds which accompanied it. In this letter he said:

"Your remarks under 'News Notes,' July number, regarding a good, lively scrap, to increase interest in county society meetings, is my excuse for sending the enclosed manuscript. If you wish to print it, you may; but only on condition that you print also the fact that the 'Doctor of the Brown Tablet' revealed his identity immediately at the conclusion of the reading of my paper. He entered a strong denial, and has treated me courteously and without malice since that time. He is a gentleman, Model 1911. Interest in our meetings was lively for a time, and I am now under bonds to be good."

In the way of comment we cannot do better than to reproduce the following "verse," perpetrated by our inspired friend McLaughlin, who gumshoes hither and yon about Indiana, dropping useful alkaloidal ideas into willing Indiana ears. Every native son of the Hoosier State is said to write poetry. Mac hasn't been in the state very long, or he might do this stunt even better than he has done. But on the whole it isn't "so worse." So, here it is:

Said the big brown tablet to the little green pill,
"You can't cure a tumor, and are bound to kill."
Said the little green pill to the big brown tab,
"You don't know the dif twixt a tumor and a crab."
So they called in a homeo to settle up the scrap,
He said, "For you both I do not care a rap."—
Proceeded then his forceps to employ.
The tumor? ah, yes, 'twas a fine little boy.

Further remarks seem unnecessary.—ED.]

PUTRID INTESTINE THE CAUSE OF DIABETES MELLITUS?

Diabetes mellitus has long been considered an incurable malady; the hypothesis, and hence the treatment, has been directed to the symptoms rather than at the cause. Recent investigators of this disease have changed their ideas as to the cause of the malady, while clinical results prove beyond doubt that the successful treatment is by a physiologic therapy.

According to Osler, diabetes is a condition of disordered nutrition. Pavey says it is the result of a faulty carbohydrate metabolism. Professor Osborne, of Yale, terms it a disturbance of metabolism rather than a disease of itself. If diabetes is not a disease, but a disturbance of nutrition, then enteritis, colitis, and appendicitis are in the same class and result from the same cause. If, as has been proven, the colon bacillus is an important factor in the last-named disorders or malady, it is possible that this bacillus may be found in the blood of those afflicted with diabetes.

The latest accepted pathologic findings make the intestines the seat of enteritis, colitis, and appendicitis, and the pancreas the seat of diabetes; the particular part involved being the islands of Langerhans, which furnish their internal secretion-ferments to the blood.

After fifty-five experiments made upon dogs by Mering and Minkowski, they established the fact that diabetes never fails to appear after complete removal of the pancreas. This naturally would lead one to believe that the whole cause of this disorder was in the pancreas. Stronger evidence in support of this theory is furnished by the fact that, if one-fourth or one-fifth of the gland is allowed to remain, or, more significantly, if a portion of the pancreas containing the islands of Langerhans and still attached to its arterial supply is transplanted under the skin of the abdomen, and the remainder of the pancreas is removed, no diabetes follows; the removal of the transplanted portion, however, is followed by glycosuria. This certainly seemingly is almost proof positive that it is not the digestion of food in the intestines which is at fault; rather it incriminates the islands of Langerhans entirely.

Now let us see what part the intestines play in this disorder. Bayliss and Starling have discovered, in the lining membrane of the duodenum, a substance called by them secretin—a hormone, or chemical excitant—where it exists in an inactive state as prosecretin, which is a product of the epithelial cells of the duodenum. This prosecretin, on coming in contact with the dilute acid of the gastric juice, is converted into secretin, the latter then exciting the cells of digestion and thus causing an outpouring of their enzymes.

We now know that the functional activity of the pancreas, liver, intestines, and to some extent the stomach depends upon the presence of this secretin. Now, then, if this be so, why cannot we lay some of the fault, if not the cause, upon the duodenum and perhaps the entire small intestine? For would it not be reasonable to assume that it was a toxic condition of the blood, due to faulty metabolism caused by a bacillus? And they invading every organ of the body? How this can be, we find by reviewing our physiology.

The stomach empties itself, little by little, through the opening of the pylorus, its contents passing into the duodenum. As soon as the gastric hydrochloric acid in the chyme reaches the duodenum, it is neutralized by the alkaline secretions from the pancreas and bile. Then, as food passes on into the small intestine, the latter changes its prosecretin into secretin, which thereupon is carried, by the blood, to the pancreas and liver and there determines the outpouring of their respective ferments into the duodenum.

This presentation, I think, is sufficient to convict the intestines. Secretin must be subject to disturbances, and it is quite possible to believe that the disturbance is caused by faulty metabolism; that faulty metabolism is caused by a diseased condition of the intestines; that the diseased condition of the intestines is caused by the colon-bacillus; and then that the colon-bacillus may be taken into the system by drinking contaminated water.

One might argue that, if this is the case, those afflicted with enteritis, colitis or appendicitis must also be afflicted with diabetes; but is it not possible for those suffering with either disease to have in their blood a substance that would be antagonistic, or, perhaps, that in their case the islands of Langerhans may secrete a toxin that has a means of making the bacilli harmless? This would lead us to believe that the person must be susceptible to diabetes. The disease has occurred where the islands showed no degenerated changes.

Bainbridge and Beddard investigated the duodenum of six persons dying from diabetes in whom the pancreas was normal, yet little or no secretin could be obtained, although persons dying of other diseases always yielded secretin. I believe that persons with a healthy pancreas are not susceptible to diabetes. I also believe that by attacking diabetes with the idea of destroying the toxic condition of the blood, by disinfecting the intestines and withholding all starchy foods until sloughing of bowels are discontinued we will get results —at least I have.

CHARLES GERRISH.

Gray, N. Y.

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[Which brings us right back to the point which we have emphasized so many times —the importance of giving the closest, most scrupulous attention to the toilet of the alimentary canal; if we can keep it clean and clinically (not bacteriologically) aseptic, and adjust the character and quantity of food to the nutritive needs of of the body, most cases of diabetes will improve—and some will (apparently) get well.—ED.]

THE NECESSITY OF THE CORSET AS A THERAPEUTIC AGENT

We live in a sensuous world: our conception of the universe depends on the impressions received through our five senses. What may appear to be true today, may, by reason of a new point of view, be deemed false tomorrow. No statement of theory or belief should be given greater weight than any other, unless the facts observed in connection therewith are sufficient to convey like ideas to all individuals endowed with equal reasoning powers.

There are two methods of education, the natural and the artificial. By the natural method one observes particular facts and forms therefrom general ideas; by the artificial method one acquires a vast store of general ideas through hearing or reading what other people have observed or think. The first method is very reliable, but very slow. The second method is rapid, but very unreliable; and this explains why it so very frequently happens that, after a long course of learning, we enter real life either with an almost artless

ignorance of many important things or with wrong, distorted, unwholesome ideas about them.

We hear much of the enormous advantages that accrue to humanity from civilization, but little is said of the serious disadvantages to the individual from the effects of that same civilization. It is the purpose of this paper to call attention, very briefly, to one of these disadvantages, also the cause, and the method of avoiding, to a large degree, the discomforts resulting therefrom.

We know that everything is in mutation; decay follows reproduction and reproduction follows decay in an endless chain of sequence. We know from results obtained in the breeding of new and improved types of vegetable, fruit, flower, animal, that nature deals with all modifications of the normal relationship of the individual to its surroundings, by adapting the structure to the new conditions. We know that these adaptations are evolutionary and result in the "survival of the fittest," and that, in time, through the working of Mendel's law, there will be produced a type suited to the conditions. But, what of the hundreds of thousands—the millions—of individuals through whom this superior type is reached? It is this intermediate, evolutionary stage of progress that particularly interests mankind today.

Comparatively recent discoveries show that man has inhabited this earth for about 500,000 years, the greater part of which time has been spent by the individual unit in the recumbent or in a squatting posture. Man was originally a horizontal animal. With the development of the intellect the vertical position was slowly assumed, nature evolving from age to age additional attachments for the purpose of holding the internal organs in place. The change, of necessity, has been very slow, as all nature's processes are and, to this day, mankind in the natural as a savage, male and female, remains a fairly healthy animal with little use for institutes, asylums, -ologists or -isms.

The very rapid change in industrial conditions within the present generation makes for an almost universal need of keeping the trunk of the body constantly erect, either sitting in a chair or standing, for at least sixteen out of the twenty-four hours. These long hours, coupled with the confinement in poorly ventilated buildings, insufficient nutrition, worry, and other causes incident to modern commercialism, almost too numerous to mention, result in an enervated muscular system. The abdominal muscles relax, permitting the abdominal contents to sag, resulting in a condition known as enteroptosis, or Glenard's disease; this means that the stomach and intestines, kidneys, liver, and spleen, one or all, are dragged down and remain more or less permanently out of their normal position; a condition creating, in turn, more or less displacement of the organs located in the pelvic cavity. It may be noted in connection with this recently named disease of enteroptosis that there frequently appear, in the daily newspapers, photographs of groups of starving people, taken in the famine districts of India and China. These photographs show evidence of great emaciation, the skin closely adherent to the bones and dipping into every little depression; this is particularly noticeable about the chest, for here the ribs stand out in bold relief—but, in contrast, the victims are all very distinctly "pot-bellied." The muscles have relaxed, collapsed from exhaustion, and the abdominal contents have slid into the lower part of the abdominal cavity, producing the marked protrusion of the lower abdominal wall.

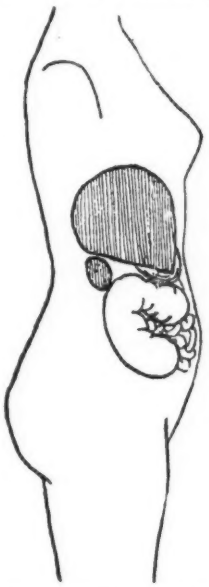

Fig. 1. Normal position of the abdominal viscera

Man was constructed as a horizontal animal, and the thirty feet of intestine carried in his abdominal cavity was at-

tached to the rigid spine, so as to function without obstruction. Nature provided loops, so that this tube, curling up and down and from side to side, was easily held in place by these attachments and the tense muscular abdominal walls. The uncivilized individual may rest if weary, but the civilized may not and hold the job. The relaxing of the abdominal muscles puts undue tension on these newer attachments and they kink the tube. The human body is shown to have many rudimentary parts, and in time will, of course, have more of them. Among these will be the colon, or large intestine, already in many an almost inert tube. The sagging of the abdominal contents resulting in kinks at the point of these later anchorings, or adhesions as they are known, produces a condition known as intestinal stasis and gives rise to a cycle of unhealthful consequences. The retention of fecal matter in the large, inactive, colon for too long a period results in putrification and the manufacture and subsequent absorption of various toxic bodies, causing a still further general enervation and sag of the muscles.

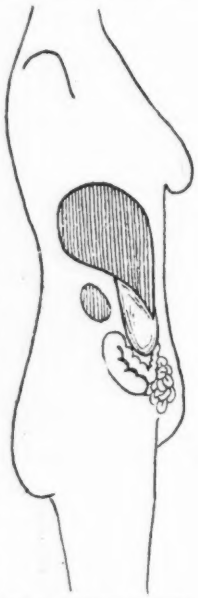

Fig. 2. Effect of muscular relaxation

Constipation, melancholia, backache, debility, biliousness, appendicitis, headache, early loss of complexion, and a long list of ailments common to the majority of the women and to many men of all civilized countries are a few of the disadvantages of our civilization. Investigations among the uncivilized races show, under normal conditions with them, an almost complete absence of these abnormal physical conditions that cause so much distress to the civilized individual.

There is no cure; but prevention is, to a large degree, quite possible. The prevention consists in replacing and holding in normal position all displaced parts by means of an artificial support, than which there is nothing equal or superior to an intelligently designed and properly fitted and applied corset.

A study of the illustrations given herewith will make the subject clear: Figure No. 1 shows the normal. Figure No. 2 shows the collapse of the abdominal contents because of the relaxing of the abdominal walls. Figure No. 3 shows the restoration to the normal by means of a properly applied artificial support. Figure No. 4 shows how this much to be dreaded disease may easily be induced by an imperfectly designed or ignorantly applied corset.

In recommending the corset, it must be distinctly understood that a high degree of intelligence and ability is demanded at every point. According to measurements taken from the uncorseted peoples, including the ancient Greek, as shown by the Venus of Milo, the female waist should measure 46.7 percent of her height. Nature appears to have devoted considerable time to establishing this proportion, and unless one has several hundred thousand years to give to the task it will not be worth while to attempt to change it.

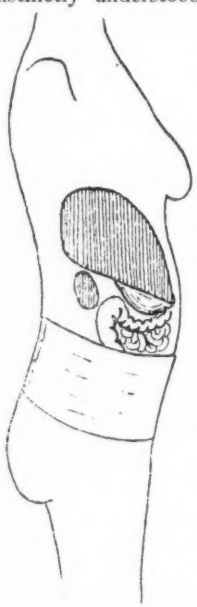

Fig. 3. The lower abdomen held up by the support

It will be noted that the ear y paragraphs of this paper apply more particularly to women. *Woman will not reason,* if she can help it. She acts on intuition, largely; and, if in doubt, is very conservative and will almost invariably stand by the old. The corset has held sway, it is said, since

about A. D. 910, and nothing but the French Revolution has ever for an instant broken the hold it has on the sex. For about two years the corset was abandoned, then France relapsed into civilization and the corset once more. The medical profession, the pulpit, reformers of all sorts and sizes have stormed and argued, but woman, for some reason (may it not have been instinct?), has stood by the garment, which, until in very recent years, has been a most injurious appliance, productive of vast harm to the human race.

It is stated by good authorities and has been very conclusively proven that more than fifty percentage of the women, and a very considerable percentage of the men, are suffering from enteroptosis. Roentgenography has opened a new line for investigating the subject, revising the accepted ideas of the anatomy and physiology of the stomach and intestines. Enteroptosis is, then, a very live issue, with widespread consequences.

Women must be taught to appreciate the Hogarth line of beauty and the normal human figure, and then to make practical application of that appreciation; must be taught that it is neither logical nor good sense to go to art galleries, there admire the perfect form, buy beautiful bronze or marble figures to adorn the home, then procure and wear wasp-waisted corsets, to her own and her children's endless misery. She must learn that style, style founded on the highly artistic normal figure, is easily possible without invalidism.

On the conscientious physician, more than any other, rests the responsibility of pointing out to woman in simple, untechnical language why she cannot crowd a fifty-inch hip and a forty-inch bust into a twenty-four-inch one-dollar bargain-counter corset without almost a certainly of having to endure personal physical distress and having the responsibility of having entailed endless misery on her descendants for all time. Women must be taught that with the marriage ceremony begin the realities of life. It is the first step in the perpetuation of the race, and each wife should seriously consider the duties of maternity, fully realizing that on her actions depend the health and happiness of succeeding generations.

It is now fashionable to have a Venus de Milo figure, to be uncorseted, natural. For some years the manufacturers have been pushing a straight-front, front-lacing corset, made on anatomical lines and on the general model of the ideal figure. Progressive dressmakers have fallen into line, and now, for the first time in the history of the world, the physician, the dressmaker, and the corset manufacturer are in accord. Is it not the duty of the physician, in the cause of humanity, to join with the manufacturer in pushing a strong educational campaign among the women, to the end that we may have a more normal generation follow the present one? It is only the honest physician that can stand between and guard the wasp-waisted and anemic shop-girl, the prematurely aged society woman, and the inexperienced developing young woman from the commercialized professional shark that would exploit her with pill, powder, pessaries, creams, applications, bands, bandages and operations.

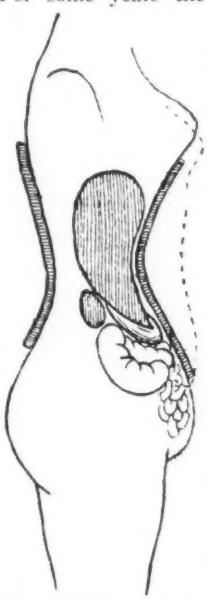

Fig. 4. Displacement due to an improperly made corset

A. S. GRAY.

Grand Rapids, Michigan.

AWARD OF THE PRIZES

In the September number of CLINICAL MEDICINE we announced that we should give certain prizes for the articles which were voted by our readers to be of the most practical value, and we asked every member of the "family" to write and tell us his choice. We have been surprised at the exceedingly small number of votes. We

expected to receive hundreds at least, and maybe thousands. It is because we had looked for more that we have withheld the announcement of the winners so long. It hardly seems necessary to wait any longer. The result is as follows:

Dr. H. F. Lewis received the largest number of votes for his paper on "Salpingo-Oophorectomy." He will therefore receive the first prize.

Dr. William J. Robinson and Dr. Benjamin H. Breakstone received exactly the same number of votes, and the second prize will, therefore, be divided between them.

The third, fourth and fifth prizes go to Heneage Gibbes, T. H. Evans, and R. G. Schroth.

The interest in the giving of prizes is so slight that we have decided not to continue this feature, though quite a number of our readers have submitted papers in competition. To them we can only express our thanks and our apologies.

VACCINES AND BACTERINS

Although my degree isn't "M. D.," I take very great interest in everything published in your valuable magazine. Because of my inability to classify myself among physicians, I hesitate to offer you anything, but cannot resist the opportunity to discuss a matter related in the October number, on page 1101, in the editorial note. If I am wrong, I desire to be corrected, but I write according to my light.

I understand a vaccine to be of *living* though attenuated virus; bacterins to be of the *dead* culture of the virus.

Begging indulgence for intrusion, but knowing that you want to be right, and if you are, then I want to be right, I am

GEO. F. BABB, D. V. S.

Topeka, Kan.

[The distinction to which the doctor refers has been made, though it is no longer employed in works on bacteriology and immunity. The word "vaccine" came into use in connection with vaccination against smallpox, and for many years was used in this connection almost exclusively. In this case (smallpox), to "vaccinate" meant to introduce an attenuated living virus, probably *not* bacterial. It might have been desirable to restrict the word to this usage, but it has long since lost that original meaning; and we are compelled to accept the recognized terminology.

According to Emery ("Immunity and Specific Therapy"), a vaccine is "a substance (usually a dead culture or living culture of mitigated virulence) the injection of which leads to the production of active immunity with less risk than that which accompanies an ordinary attack of the disease."

This author describes the four methods of producing active immunity as follows: (1) By inducing a natural (presumably milder) attack of the disease; (2) by the use of living vaccines (the most important being those of smallpox and rabies); (3) by the use of vaccines composed of dead bacteria; and (4) by inoculation with the bacterial toxins, the bacteria themselves having been filtered away.

If the doctor will stop to think over the new terminology—of "typhoid vaccines," "polyvalent vaccines," "bacterial vaccines," "stock vaccines," etc.—he will realize that this word (not a satisfactory one, to be sure) has already acquired a generic significance, and has probably come to stay.—ED.]

ANOTHER DOCTOR DREAMS

I wish to remonstrate with Dr. Sophia Brunson. On page 1096 of the October CLINIC she favors us with "The Doctor's Dream." I admit the beauty of the poem and congratulate her upon the sentiment and beauty of her addition to it. But the fact is that in a sense it is rank plagiarism; and the fact of the matter is, anyway, that she is away off in the recital of the actual events that took place. If you listen to my story you will see that I can not fail to know the truth.

Among the numerous offspring of my grandfather (sixteen in all) there was an eldest son named James, and called Jimmy, and a youngest son named Nathaniel, and called Nattie. Both became doctors and both located in that part of southeastern

Illinois known as "Egypt." Nattie was my beloved father. Jimmy practised medicine for 55 years and Nattie for 30 years. Now my good, kind brethren, those of us who roll over smooth city streets in our automobiles, and those heroes who brave the hardships of a country practice, reflect what those years of work meant in the pioneer days of southern Illinois. But then—twenty years ago Nattie died. No one who knew Dr. Bristow will for a moment doubt that if there is a place "where weary souls may find a balm, and weary feet a rest," he went to that place. Five years ago Jimmy died. Being a just man he also went to the place where his baby brother was to be found.

Supposedly.

The facts are that Jimmy spent some considerable time looking for the small brother and failed to find him. Had any one seen him?

"Yes, he was here some time ago, but lately we have not seen him."

Finally Jimmy sought permission and an escort, that he might search for Nattie in those other regions where no doctors ever go.

Voluntarily.

After a weary time he came at length to a prodigious wall and gazing up he thought he discerned a form seated on top of the wall. Bidding the escort wait he clambered up, and there was Nattie! !

"Oh! Nattie——But what in——? ?"

"Why, hello, Jimmy. Have a seat. I thought you would come."

But Jimmy never heard, for on the further side of the wall he had spied a throng and a country—a country of cold, and wind, and snow, and cutting frost, and sharp rough roads, and rain, and hail, and lightning, and fierce winds, and dust, and heat, and glaring light and gloomy darkness. The throng pursued its weary way through this dismal land, some on foot but mostly on the backs of misshapen beasts, and all without sleep, and all sorely afflicted with an eternal weariness.

For a long time Jimmy gazed, then finally said: "Tell me, Nattie, tell me what on Earth did these people do?"

Said Nattie: "Why, these are the people who never paid their doctors' bills."

Settling himself into a comfortable position beside his brother, Jimmy called down to the escort: "Never mind me, I'm going to stay with Nattie."

I trust that Dr. Brunson will take the correction in the good spirit in which it is given, for, you see, being a family matter this way, I can not be mistaken.

J. H. Bristow.

Portland, Ore.

THE FORMULA OF DIORADIN

We have just received a communication from Louis Gero, Ltd., sole American agents for the new French product, Dioradin, explaining that a serious error crept into the published formula of their preparation, which was given in these pages last month. This error related to "peptonized iodine." The use of this term was due to a mistranslation of the original article. It should read "iodized peptone." This, of course, is perfectly understandable. Dioradin seems to be an exceedingly valuable preparation and deserves a careful trial in cases of tuberculosis and other conditions. For information address Louis Gero, Ltd., 206 Broadway, New York.

HEALTH EXHIBIT AT THE ILLINOIS STATE FAIR

The State Board of Health had a most striking exhibit at the fifty-ninth Illinois state fair, and no one who visited the "greatest fair on earth" failed to appreciate this public-health display.

The booth was located immediately to the right of the head of the west stairway in the exposition building, and in its uniqueness and attractiveness excelled even the exhibits of the state health department of previous years. The exhibit in its entirety was instructive, being devoted particularly to various means of disseminating knowledge regarding the cause, prevention, and the results of tuberculosis and typhoid fever.

On the walls of the booth were arranged, in a forceful sequence, charts, placards, maps, legends—not in exaggeration, but portraying cold, and in several instances,

lamentable facts regarding the cause of consumption, its vast toll on mankind, and telling in terse phrases the means of avoiding and of influencing the ravages of this malady, which causes one out of every

WHY SANTA WAS LATE.

We like Christmas, but old Santa Claus does hold most of the cards at this time of the year. Picture from *Puck*.

seven deaths that occur, and takes its heaviest toll from those of the active working-age—over one-half of the total deaths from consumption in Illinois striking between the ages of twenty and forty.

Approaching the booth, one's eyes immediately fell upon a large illuminated sign bearing this inscription in bold type: "Every time a light goes out, some one in the civilized world dies from consumption —two every minute, 120 every hour, 2880 every day, 1,000,000 every year." Bordering this, were red incandescent lamps, and every thirty seconds the lights successively were extinguished automatically, depicting a death from consumption. This sign formed the center of the tuberculosis exhibit.

There were two additional exhibits to the tuberculosis section of the booth which in themselves were a worthy credit to the board's educational public-health crusade. These were "illusion models," one a contrast room illusion, the other known as the "death illusion." The contrast room model consisted of two miniature bedrooms, one clean and tidy, and the other dirty and disarranged. The spectator looked through an opening, when the miniature rooms flashed, one at a time, before his eyes, changing from the dirty, untidy to the sanitary and attractive.

The second illusion model showed the death-rate from consumption. Every thirty seconds a doll representing a healthy person changed to a skeleton, illustrating the rapidity of deaths from consumption in the civilized world. There were also presented different types of window tents used in the fresh-air treatment of consumption.

On the opposite side of the health exhibit were, attractively and conveniently arranged, microscopic specimens, the factors active in the dissemination of preventable diseases, specimens of tuberculous organs and tissues, a doll-house illustrating a wrong way and the right method of house disinfection, and the materials used in same, and the equipment and methods necessary in isolating and recognizing bacteria or disease germs. Specimens under the microscope which attracted no little attention of the throngs were those of a house-fly's legs and wings, on the hairs of which were shown the bacilli causing typhoid fever, and illustrated how the pest had earned the title of "typhoid-fly."

Then there were platings of polluted water, contrasted with those from pure water, showing the growth of sewage bacteria in the former. Along with these, was a sample of sparkling, and to all appearances pure water, but which in reality contained the death-dealing typhoid germs, while beside this sample was one of turbid water, not at all inviting, but potable or safe for drinking purposes. These illustrated the fact that the physical appearance of water is not necessarily an index of its purity. On this table also was shown what the board pleased to call the "typhoid trio"—three flasks, containing milk, water, and flies, respectively. These are the principal means in the transmission of typhoid fever. There were also plates of good milk, bad milk—plates exposed in clean and dusty barns. Air-plates showing the bacteria spread by sweeping, and the numbers out-of-doors as compared with crowded rooms.

Other specimens were cultures of the bacilli causing tuberculosis, typhoid fever, and diphtheria; tuberculin, diphtheria antitoxin, typhoid vaccine, smallpox vaccine.

The visitor was informed that Illinois is the only state in the Union furnishing diphtheria antitoxin free to the rich and poor alike, ready for immediate use.

The destructive effect of tuberculosis on the various organs of the human body was shown by a fine collection of diseased organs and tissues, exhibiting tuberculosis in its various stages and varieties, of the lungs and of the spine—showing also how it may be spread through the body to other organs: the stomach and intestine—by swallowing, and to remote organs by the blood.

JOHN DILL ROBERTSON.

Chicago, Ill.

POETRY ABOUT THE HUMAN BODY

A reader of CLINICAL MEDICINE, Dr. S. A. Orwig, of Mansfield, O., sends the poem which we print below. It is clipped from a newspaper published in 1860, and the authorship is unknown. The verse is beautiful enough to deserve preservation in the doctor's scrap-book. And, by the way, every doctor who likes poetry, especially that dealing with the profession and with medicine, should have a scrap-book to preserve things like these:

THE ANATOMIST TO HIS DULCINEA

I list as thy heart and ascending aorta
  Their volumes of valvular harmony pour;
And my soul from that muscular music has caught a
  New life 'mid its anatomical lore.

Oh, rare is the sound when thy ventricles throb
  In a systolic symphony measured and slow,
When the auricles answer with rhythmical sob,
  As they murmur a melody wondrously low!

Oh, thy cornea, love, has the radiant light
  Of the sparkle that laughs in the icicle's sheen,
And thy crystalline lens, like a diamond bright,
  Through the quivering frame of thine iris is seen!

And thy retina spreading its lustre of pearl,
  Like the far-away nebula, distantly gleams
From a vault of black cellular mirrors that hurl
  From their hexagon angles the silvery beams.

Ah! the flash of those orbs is enslaving me still,
  As they roll 'neath the palpebræ, dimly translucent,
Obeying, in silence, the magical will
  Of the oculomotor—pathetic—abducent.

Oh, sweet is thy voice, as it sighingly swells
  From the daintily quivering chordæ vocales,
Or rings in clear tones through the echoing cells
  On the antrum, the ethmoid and sinus frontales!

The preceding verse reminds me of Dr. Oliver Wendell Holmes's beautiful "anatomist's hymn," well known to every reader of the genial "Autocrat of the Breakfast Table." Although, of course, every member of the "family" is familiar with it, we shall all be the better for reading it over occasionally. I love to turn to it again and again. It follows:

Home of Dr. F. R. Stoddard, Shelburne, Vt.

THE LIVING TEMPLE

Not in the world of light alone,
Where God has built his blazing throne,
Nor yet along in earth below,
With belted seas that come and go,
And endless isles of sunlit green,
Is all thy Maker's glory seen:
Look in upon thy wondrous frame—
Eternal wisdom still the same!

The smooth, soft air with pulse-like waves
Flows murmuring through its hidden caves,
Whose streams of brightening purple rush
Fired with a new and livelier blush,
While all their burden of decay
The ebbing current steals away,
And red with Nature's flame they start
From the warm fountains of the heart.

No rest that throbbing slave may ask,
Forever quivering o'er his task,
While far and wide a crimson jet
Leaps forth to fill the woven net
Which in unnumbered crossing tides
The flood of burning life divides,
Then kindling each decaying part
Creeps back to find the throbbing heart.

But warmed with that unchanging flame,
Behold the outward moving frame,
Its living marbles jointed strong
With glistening band and silvery thong,

And linked to reason's guiding reins
By myriad rings in trembling chains,
Each graven with the threaded zone
Which claims it as the master's own.

See, how yon beam of seeming white
Is braided out of seven-hued light;
Yet in those lucid globes no ray
By any chance shall break astray.
Hark, how the rolling surge of sound,
Arches and spirals circling round,
Wakes the hushed spirit through thine ear
With music it is heaven to hear.

Then mark the cloven sphere that holds
All thought in its mysterious folds,
That feels sensation's faintest thrill
And flashes forth the sovereign will;
Think on the stormy world that dwells
Locked in its dim and clustering cells!
The lightning gleams of power it sheds
Along its hollow glassy threads!

O Father! grant thy love divine
To make these mystic temples Thine!
When wasting age and wearying strife
Have sapped the leaning walls of life,
When darkness gathers over all,
And the last tottering pillars fall,
Take the poor dust Thy mercy warms
And mold it into heavenly forms!

There is no poetry that can surpass that of the Bible, and there is no poetical description of our wonderful body that can excell that marvellous picture of the waning of the vital powers, as "the evil days draw nigh," given in the sermon to youth found in Ecclesiastes. We quote the metrical version from "The Modern Readers Bible:"

THE COMING OF THE EVIL DAYS—A SONNET

Remember also the Creator in the days of thy youth:
Or ever the evil days come,
And the years draw nigh,
When thou shalt say, I have no pleasure in them:

Or ever the sun
And the light,
And the moon,
And the stars,
Be darkened,
And the clouds return after the rain:

In the day when the keepers of the house shall tremble,
And the strong men shall bow themselves,
And the grinders cease because they are few,
And those that look out of the windows be darkened,
And the doors shall be shut in the street;

When the sound of the grinding is low,
And one shall rise up at the voice of the bird,
And all the daughters of music shall be brought low;

Yea, they shall be afraid of that which is high,
And terrors shall be in the way;

And the almond tree shall blossom,
And the grasshopper shall be a burden.
And the caper-berry shall burst;

Because man goeth to his long home,
And the mourners go about the streets;

From *Puck* by permission
Copyright, 1911

THE ANIMAL OR HUMANITY?
In a series of powerful cartoons *Puck* is answering the arguments of the anti-vivisectionists

Or ever the silver cord be loosed,
Or the golden bowl be broken,
Or the pitcher be broken at the fountain,
Or the wheel broken at the cistern;

And the dust return to the earth,
As it was;
And the spirit return unto God
Who gave it.

MUSHROOM POISONING

The growing interest in the study and use of mushrooms as an article of food, and that from time to time cases of poisoning therefrom occur, should lead physicians to give attention to this subject and study the treatment of poisoning from this source.

To maintain the confidence and respect of the laity, the physician must be able to do more than was reported to me by a victim of minor mushroom poisoning, who wrote: "The physician summoned looked at me during each of three visits he made, offered nothing by way of relief, but afterward sent me a bill for $10 which I paid with poor grace."

The poisonous mushrooms, or toadstools as they are often called, are of two classes: (1) the minor, or irritant, (2) the major, or deadly, poisons. The first act locally on the intestinal tract. Of these may be mentioned lepiota, morgani and clitocybe illudens. While the eating of such will cause the person to be more or less ill for a few hours or a day, vomiting and purging being common symptoms, unless great quantities have been eaten recovery takes place.

Of the major, or toxic, class, little has been learned. The poisonous properties are due to certain principles which have been isolated. The two best known are muscarine and phallin. Both exist in one family of mushrooms, the amanita. Muscarine is most abundant in amanita muscaria, and in a less degree in amanita pantherina and also in bolitus luridus.

The action of muscarine is so violent that 0.06 gr. is a dangerous dose for a man. It is used by the inhabitants of northern Russia as a means of inducing intoxication.

Some research has been attempted to determine the nature of the amanita poisons and to discover an antidote. W. S. Carter, Professor of Physiology of the University of Texas, has made over 1000 experiments with the four deadly varieties of amanita, with definite results. He calls attention to the fact that in mushroom poisoning in man no knowledge of the species can be obtained. For sometimes a number of varieties have been gathered and cooked together, some of which may be of the edible and some of the poisonous kind, with corresponding degree of poisoning; or one may be of an irritating and another of the deadly variety. Cooked together, these would produce the symptoms of both kinds. The most reliable study of the amanita poisons has been gained from experiments on the lower animals.

In *The Boston Medical and Surgical Journal*, Nov., 1879, are recorded the results of experiments by Dr. Ott, once a demonstrator of physiology at the University of Pennsylvania, as follows:

"Frog sternum removed. At 3:55 p. m., heartbeat, 36 per minute. At 3:58, injected 0.0005 Gram muscarine subcutaneously. At 4:00, heart stopped in diastole; on pricking, makes contraction; the ventricle is distended with blood, bulbous. At 4:03, gave 0.001 Gram atropine subcutaneously. At 4:05, heart spontaneously began to beat 28 per minute. It continued beating until next morning, and the animal had completely recovered from the paralysis induced by the muscarine."

A repetition of the experiment gave about the same result. Since then the frequent use of atropine by physicians, in muscarine poisoning, has in some cases been followed by good results.

Chas. McIlvain, in "One Thousand American Mushrooms," publishes at length the history of a family of Shenandoah, Pennsylvania, who were poisoned by eating amanita vernus. Dr. J. H. Shadle treated the family and reported the history of the cases at length to the author. He began the use of atropine with gr. 1-180 + gr. 1-90 + gr. 1-90 + gr. 1-90 (total, 7-180 grain), at intervals of six to eight hours. Of five poisoned two died, which the doctor attributed to not using atropine earlier

and the fact that so much had been ingested that the poison had become too virulent to be counteracted.

Dr. F. F. Wood has also successfully administered daturine and hyoscyamine in such cases. Prof. Schniff of Italy advocated the use of stramonium.

Unfortunately there is little medical literature on the symptoms and treatment of poisoning from amanita poisons. Most of that at our command is to be found in writings of authors on the study of fungi. From Chas. McIlvain, in "One Thousand American Fungi", I quote the following:

"Symptoms of muscarine poisoning do not usually appear for eight to twelve hours after eaten, unless a large quantity has been eaten, when they may appear in one-half hour. Usually the first symptoms are cramp-like pains in the extremities. Later, colicky pains in abdomen, burning thirst, vomiting and purging. The pulse may be slow and strong at first, but later becomes rapid, small and feeble. The blood pressure is low, and as a result faintness is a common early symptom. Extreme pallor is often noticed. The secretions are increased. Sweat and saliva may be secreted in abnormal quantities. The pupils are much contracted. Dulness of vision or double vision may be an early symptom. The respirations are slow, becoming shallow and stertorous when poisoning is severe. The mental state may be clear at first, but becomes dull, deepening into unconsciousness and deep coma, if much has been taken."

V. K. Chestnut, Department of Agriculture (Circular No. 13, Division of Botany), after observing two cases of poisoning in Washington, reported symptoms as follows:

"They appeared in from one-half to two hours. Vomiting and diarrhea, with almost always a pronounced flow of saliva, suppression of urine, and various cerebral phenomena, beginning with giddiness, loss of confidence in one's ability to make ordinary movements, and derangement of vision."

Treatment.—If called early, before the ingested mushrooms have had time to be absorbed from the alimentary canal, evacuants are generally advised, but some authors discourage their use. Full doses of zinc sulphate or apomorphine are recommended, though in cases where profound stupor exists these may be inactive.

Atropine is the best-known remedy. It relieves by removing inhibition of the heart, which occurs as an early symptom. If eight or twelve hours have elapsed, as soon as called administer, hypodermically, gr. 1-100 to gr. 1-50 of the antidote, repeating every half hour until 1-20 grain in all has been given or recovery assured.

If purgatives are used, the oleaginous are preferred. The intestines should be cleansed and washed out with an enema of warm water and oil of turpentine, after first giving the atropine hypodermatically.

Treat symptoms as they arise. Strychnine and suprarenal extract can be used to advantage in restoring the circulation, especially late in the poisoning. Apply external heat if the temperature is subnormal. The subcutaneous injection of a 0.6- to 0.7-percent solution of sodium chloride should be tried in severe cases seen late in the poisoning. Atropine is of little value if not used in the early stage of poisoning with this substance.

Tobacco is mentioned as an antidote. In New Ulm, Minnesota, two young men were poisoned by eating amanita. One died, the other recovered. In conversation with the latter he stated that he attributed his recovery to the fact that he had used tobacco freely.

Phallin.—Its exact chemical nature is not known. It is a very deadly poison, 0.0015 Gram per 2 pounds weight of the animal being a fatal dose for dog or cat. It is the active principle of the most deadly of all mushrooms, the amanita phalloides, or death-cup fungus.

Of its effects, and so forth, I again quote Chestnut:

"The fundamental injury is not due, as in the case of muscarius, to a paralysis of the nerves controlling the action of the heart, but to a direct effect on the blood-corpuscles. These are quickly dissolved by phallin, the blood-serum escaping from the blood-vessels into the alimentary canal and the whole system being rapidly drained

of its vitality. No bad taste warns the victim, nor do preliminary symptoms begin until nine or fourteen hours after the poisonous mushrooms are eaten. There is then considerable abdominal pain, and there may be cramps in the legs and other nervous phenomena such as convulsions and even lockjaw or other kinds of tetanic spasms. The pulse is weak. The abdominal pain is rapidly followed by nausea, vomiting, and extreme diarrhea; the intestinal discharges assume the rice-water condition characteristic of cholera. The latter symptoms are persistently maintained generally without loss of consciousness, until death ensues, which happens in from two to four days. There is no known antidote by which the effects of phallin can be counteracted.

"Treatment should be to remove the undigested material, if not already vomited, by methods suggested for cases of poisoning by muscarine. If the amount of phallin taken up by the system is not too large, it may wear itself out on the blood, and the patient may recover. This may be assisted by transfusion into the veins of blood freshly taken from some warm-blooded animal, or a 0.6- to 0.7-percent salt water-infusion is the most rational treatment. At least a quart should be injected. It restores the blood pressure by increasing the fluid in the vessels, and aids the organs of excretion; and relieves the intense thirst. The use of large doses of suprarenal capsule is reported to afford more permanent relief."

In *The Medical Press*, Sept. 30, 1899, is reported the case of a man 52 years of age who ate amanita phalloides, with the usual symptoms, and treatment without benefit. Pulse dropped to 22 per minute. One quart of saline solution administered was followed by immediate improvement. In an hour the pulse was 60, temperature normal. Next day he resumed his work.

Helvelic acid is another deadly poison, one which is sometimes found in gyometra esculenta, particularly in old or decaying specimens. The young and fresh are considered free from the poison. The symptoms are similar to those of the deadly phallin. There is no known antidote. Treatment should be such as is recommended for phallin.

M. S. WHETSTONE.

Minneapolis, Minn.

A WONDER WORKER

A Missouri subscriber of CLINICAL MEDICINE sends the following prescription, with this comment:

> Enclosed find copy of a prescription given for angina pectoris by a prominent physician of ———, Missouri. To me it is a curiosity.
>
> Here's the prescription:
>
> | | |
> |---|---|
> | Sod. bicarb. | dr. 1-2 |
> | Pulv. thyroids | dr. 1 |
> | Pulv. asafœtida | dr. 1 |
> | Quinine sulph. | dr. 1-2 |
> | Strychnine | gr. 1 |
> | Ac. arsenous | gr. 1 |
> | Pulv. gentian | dr. 1-2 |
> | Pulv. lactopep | dr. 1-2 |
> | Pulv. hydrastine | grs. 10 |
> | Pulv. digitalis | grs. 8 |
> | Hydr. chlor. mit. | grs. 3 |
> | Ext. cascara sagrada | grs. 15 |
> | Ext. belladonna | grs. 4 |
>
> M. ft. caps. No. 30.
>
> Sig. One capsule T. 2d. before meals an hour.

Is there any significance in the presence of thirteen ingredients in this prescription? There is said to be luck in odd numbers!

DIPLOCOCCUS NEPHRITIS

For the last few years the writer has been observing the effects of diplococcus pneumoniæ upon the human system, other than upon the respiratory organs. Attention has been called several times to the fact that these germs, when once in the system, enter the blood and may become pathogenic in any part of the body where for any cause there is a lesion.

In my own person I found that diplococcus arthritis resulted from a bruised knee. In another case a bruised prostate, the result of riding a faulty bicycle saddle, set up diplococcus prostatitis. Several times in my routine laboratory work these germs have been found in the urine. The results of treating such a case with what I have found to be specific for these bacteria is what is reported below.

Mrs. R., 64 years old, is the patient. At the time of her first illness her daughter was in school in Chicago, but was called home to

act as her mother's nurse. Though well acquainted both with mother and daughter, I knew nothing of the nature of the mother's illness till September 6, 1910, when a sample of urine was sent me for analysis. The report returned showed a specific gravity of 1030, a large amount of sugar, acidity 80°, and on standing a few minutes, a precipitate that half filled the glass. This consisted of blood-cells, bilirubin, disintegrated tissues, and large numbers of diplococcus pneumoniæ and a less number of bacillus urinæ. No recommendations as to treatment were made, that being left to her attending physician.

Three days later a second sample showed a specific gravity of 1028 and the other conditions somewhat improved. But a third sample, September 9, was worse than the first, having a specific gravity of 1031, with the other conditions corresponding. (This periodicity of five or six days had been noticed in other cases of diplococcus invasion.) In the letter accompanying the third sample, the daughter wrote that the physician said her mother could not live more than a few weeks; if I had any recommendations to make, they wished I would do so.

Incidentally I learned that the sick lady was taking a diabetes mellitus compound and the triple arsenates with nuclein, and I at once advised the addition to these of creosote, 1-67 grain; arbutin, 1-67 grain; chionanthin, 1-6 grain; with directions to give 5 tablets of the first and 2 each of the other two after each meal. Improvement began at once, so much so that, at the next visit, the physician told the daughter that if her mother kept on at that rate she would get well.

Improvement did continue without interruption. I found, however, that after the dipplococcus had almost disappeared, there still were traces of sugar, and too many of the bacillus urinæ. For this condition, I sent the daughter a combination of formin, arbutin and ammonium benzoate, with instruction to give 2 tablets a day. The last examination of her urine, which I had made for me on December 7, 1910, showed a specific gravity of 1013, without a trace of sugar, and so few bacteria that it was difficult to find them.

Mrs. R. is up and about as usual, the only change from her former self being that strength has not been quite restored.

G. H. FRENCH.

Carbondale, Ill.

[Since sending the above article, written some months ago, Dr. French has reported as follows concerning this case: "Uranalyses have been made from time to time up to June 19, 1911, with either no sugar or only a trace. Mrs. R. still continues to improve in health and strength."—ED.]

BINDING MAGAZINES

While there is no method that is as satisfactory for binding magazines as that of letting the publisher do it for you, many prefer, for one reason or other, to do it themselves.

I think the following method is as satisfactory, for the expense and labor involved, as any.

Remove the advertisements, in order to reduce the bulk of the book. Then, taking the year's issues, lay them on a board and even the edges. With a hammer drive a wire-nail through the upper and lower borders of the back edge, making two holes, about an inch apart and about an inch from the top and bottom edges. That is to say, four holes in all, and about an eighth of an inch from the binding edge. The nail used should be of the caliber of a No. 8 French catheter.

As each hole is made, withdraw the nail, and pass through the orifice an end of a pipe-cleaner, making of it a staple, which, as the second hole is made, is drawn through and clinched on the back of the volume. These cleaners cost five cents for two dozen and should be on sale in any tobacco store.

The advantages of these pipe-cleaners as binders is that they are soft, thus not tending to wear the holes larger; they are as strong as can possibly be required, and they are as flexible as cord, thus enabling torsion to be applied to make the leaves set solidly together. The ends can then be clipped off and, if desired, a strip of adhesive plaster applied over them to prevent any scratching from the ends.

This, however, will not serve for THE AMERICAN JOURNAL OF CLINICAL MEDICINE, which is too substantial a volume. It might, however, be divided into two parts of six months each.

JAMES E. COSGROVE.

Brooklyn, N. Y.

NEWS NOTES

The Hahnemann Medical College, of Philadelphia, is raising a $1,000,000 endowment fund; of this sum, $200,000 has already been subscribed.

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One of the new laws of California provides for the commitment of drunkards to asylums for the insane. Be good or—"your wife will get you if you don't watch out."

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During the first eight months of 1911, twenty-five hundred persons were bitten by dogs in New York City. Nineteen-hundred and twelve of these were found rabid, and seven fatalities occurred as a result of these bites.

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The cholera is said to be spreading all over Italy, the largest number of cases occurring at Leghorn, Rome, Naples, and in the other large seaport towns. Thousands of deaths have also been reported from European and Asiatic Turkey.

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Mr. Frank B. Leland, of Detroit, has arranged to give an open-air public school to the city of Detroit, if a site is provided and the board of health and board of education will consent to the work. This school will be used for the instruction of tuberculous children.

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The City of Chicago has purchased 160 acres of land at North Fortieth, Bryn Mawr, and Peterson avenues, and is expecting to build in this locality a great municipal tuberculosis sanitarium. The plans have been prepared for the buildings and the total cost of the institution is estimated at about $878,000. It will provide accommodations for 1500 patients a year.

We are sorry to learn of the death of Dr. Robert Lowell Burrage, who was medical director of The Prudential Insurance Company, and Chief of the Company's staff of 11,000 medical examiners in the United States and Canada. Dr. Burrage died October 29, at Newark, N. J. He was fifty-four years of age and had been with the Prudential nearly twenty-two years.

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Dr. George W. Webster has tendered his resignation as president of the Illinois State Board of Health. Dr. Webster has held this position for ten years, and for eleven years has been a member of the board. The many friends of Dr. Webster, who know the efficiency and conscientiousness of his work, will regret exceedingly that he has found it necessary to take this step.

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An inspection of the pupils of the Altgeld school in Chicago discloses the fact that out of 237 pupils 67 were diphtheria carriers. The inspection was ordered by the Health Department in the hope of stamping out an epidemic which was discovered in the Englewood district. The whole neighborhood has been infected, but fortunately up to the time of writing there have been no deaths.

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On October 16, several hundred physicians and business men gathered in the assembly hall of the Massachusetts General Hospital, to commemorate the sixty-fifth anniversary of the employment of ether for painless surgery by its discoverer, Dr. William T. G. Morton. Dr. Simon Flexner, director of the Rockefeller Institute, was the guest of honor and made the commemorative address.

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The newly elected Lord Mayor of London, Sir Thomas Boor Crosby, M. D., is a physician. From an English exchange we learn that since the office of Lord Mayor of London was created, more than seven hundred citizens have held that important and much coveted post, but this is the first time in the history of London that its chief citizen has been chosen from the ranks of the medical profession.

Dr. Waugh and his friends are establishing an absolutely sanitary summer home on the shore of Lake Michigan, near Muskegan. It is easy and cheap of access, so that a Chicagoan may spend Sundays with his family there and be back early Monday morning; well shaded, primitive, safe, best bathing possible; no mosquitoes, select, and very inexpensive; not a dry-goods fight, but back to nature.

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All Illinois physicians who practise in the country should secure copies of the September *Bulletin* of the Illinois State Board of Health. This contains more information concerning the safe disposal of human excreta than we have ever seen before crowded into so small a compass. There are simple directions for the construction of sanitary privies, and it tells of the dangers of house-flies, and how they can be overcome. Get a copy.

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According to Dr. J. K. Scudder (*Eclectic Medical Journal*), there are about 75,000 members of the regular school practising in the United States; 9000 homeopaths; 7500 eclectics; 4000 osteopaths; and 4500 unclassified. Dr. Scudder says that, while the various directories give the names of 120,000 to 130,000 physicians, they contain the names of various men who are deceased, removals, duplicates, and even "undertakers, embalmers, veterinary surgeons, *et al.*"

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The Radium Institute opened in London, on August 14, owes its existence to the generosity of Sir Ernest Cassel and Lord Iveagh. The principal asset of this institution is one Gram of radium, which is valued at $75,000. The institution also has a balance which will weigh 1-1000 of a milligram, and a microtome that will cut twenty-five thousand slides to the inch. Excellent results are being claimed from the use of radium for the treatment of cancer and other diseases.

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Dr. E. S. McKee, of Cincinnati, Ohio, is now an honorary member of the Amalgamated Union of Joke Blacksmiths. *The Cincinnati Post* recently awarded him a prize for the best mother-in-law joke, the award being decided by a vote of its readers. Here is the joke for which he won the prize:

"I see that you and your brother do not speak."

"No, we went boating with our wives and their mothers and we upset the boat. Each man saved his wife and the other man's mother-in-law."

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The greatest living philanthropist is a doctor—Dr. D. K. Pearsons, who resides at Hinsdale, near Chicago, he having practically completed the distribution of his entire fortune amounting to about $7,000,000. Needless to say, Dr. Pearsons did not accumulate this fortune in the practice of medicine, which he abandoned many years ago. He has given his money mainly to small colleges, and now that it is all gone, he has presented even his elegant home to the little suburban town in which he lives, to be used as a library and museum, while he is spending the last few years of his life—he is now ninety-one—in a local sanitarium.

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At a recent meeting of the British Medical Society, Dr. Byron Brumwell asserted that the practice of medicine is replete with mistakes. Mistakes of incapacity; mistakes of inexperience; mistakes in the most ordinary observations; of gross ignorance; of inexcusable carelessness; of omission and commission; "mistakes which either to the practitioner who makes them, to the patient whose case is wrongly diagnosed, or to the public at large, are of the greatest importance, since they may entail very disastrous consequences." Confessions of this kind are not an evidence of weakness, but of strength. Just as soon as we begin to realize that we do not always do entirely right, just so soon are we likely to increase our efforts to do better work. Many of the mistakes referred to in Dr. Brumwell's address were due to carelessness in diagnosis. Thanks to the scientific laboratory it is now possible to eliminate most of these errors, and with more accuracy in diagnosis and more accuracy in medication, better success is sure to follow our efforts.

We have but recently been informed of the demise, on August 2, of Dr. J. B. Atchison of Lewistown, Montana. The Doctor was one of our old-time Montana friends, for many years a reader of this journal, and a devoted adherent to the idea of active-principle therapy. At the time of his death he was nearly sixty-nine years of age. He was graduated from Jefferson Medical College, began practice in St. Joseph, Missouri, removed to St. Louis and later to Helena, Montana, where he began work in 1878. He continued in practice in that city until 1899, when he removed to Lewistown. During his residence in Helena, we are informed, he enjoyed the largest clientele ever attained by any one physician in the State of Montana. He was a member of the Montana State Medical Society, the American Medical Association, and of other societies, and was formerly president of the Montana State Board of Medical Examiners. Dr. Atchison closely resembled in appearance the picture of the physician attending the sick child, in the famous painting, "A Ray of Hope," which adorns the office of most physicians. Those who know and love this picture will appreciate the statement made by the Rev. D. B. Price at Dr. Atchison's funeral:

"The most noble trait of the deceased was his appreciation and love of children. He saw in every child that which provoked a smile and a kind word."

State-Board Examination Department

Edited by R. G. SCHROTH, M. D., 546 Garfield Ave., Chicago, Ill.

ANY QUESTIONS YOU WANT ANSWERED

[We are sure that every reader of CLINICAL MEDICINE finds this department helpful—especially if he be one of the many contemplating new locations in other states or if he is preparing to face a state board for the first time in the near future.

While it is already of intense interest, we think it may be possible to make the department even more helpful through a little cooperation on your part. When you are going through these questions or making plans for your transplantation to the new field, I am sure you think of many things you would like to know. You may desire information concerning reciprocity, concerning age allowances for old practitioners, concerning "recognized" medical colleges, concerning dates and places of examinations, concerning "catch" questions and how to answer them, and any number of things about the character of examinations (and the questions themselves) in different states.

Write to Dr. Schroth and tell him your troubles. Incidentally, don't forget to tell him how much you enjoy his course—and *don't*, for goodness' sake, forget to put in stamps enough to guarantee a reply.]

PRACTICE OF MEDICINE

1. Give diagnostic symptoms of hydrothorax and of pyothorax, and differentiate the two conditions.

Hydrothorax is more chronic in character and more general in location, and it may be associated with syphilis. The symptoms are less severe than in pyothorax. The latter condition is more acute in character and more localized, and it is associated with pus condition elsewhere or with tuberculosis. The symptoms are more severe and there is high fever, leukocytosis, indican in urine, general fever, and it has more or less of a characteristic onset.

2. How discriminate organic from functional murmurs of the heart?

Organic murmurs: (1) Constant and regular in time; (2) always heard at the same place.

Functional murmurs: (1) Not constant, and are irregular in time and occurrence; (2) not always heard in the same place; (3) always heard at base of heart; (4) found in anemic patients; (5) found in nervous patients.

3. State pathologic significance of rigid recti muscles of the abdomen.

This condition indicates peritonitis or inflammation in center of abdomen.

4. Differentiate between chronic parenchymatous nephritis and chronic interstitial nephritis.

Chronic parenchymatous nephritis: Epistaxis and cerebral hemorrhages rare. Occurs most frequently before age of 40. Blood-corpuscles and connective-tissue shreds more frequently found in urine. Casts more numerous and in greater variety; waxy, granular, fatty, and hyaline casts. Epithelia from kidney and pus-corpuscles more frequent and numerous.

Urates and phosphates predominate; oxalates rare. Albuminous retinitis rare. Gangrenous erysipelas and phlegmonous swellings common; dyspepsia and anemia. Visceral complications not uncommon. Arterial atheroma rare.

Chronic interstitial nephritis: Epistaxis and cerebral hemorrhage frequent. Occurs most frequently after 40. Development more gradual; health less impaired; duration longer. Casts rare, hyaline kind predominating. Kidney epithelia and pus-corpuscles scanty or absent. Calcium oxalate almost always occurs. Albuminous retinitis common. Visceral complications rare. Atheroma common.

5. What is gastroptosis, and what is gastrectasis?

Gastroptosis is the falling, or dropping, of the stomach. Gastrectasis designates the condition of a much enlarged stomach; a dilated stomach.

6. Differentiate acute synovitis and acute articular rheumatism.

Acute articular rheumatism is characterized by pain, heat, redness, and swelling in the joints, moderate fever, acid sweats, and a constant tendency to inflammation of the serous membranes of the heart. It affects progressively joint after joint. Synovitis is confined more generally to one or two joints. It is an inflammation of the synovial membrane; is usually very painful; the swelling fluctuates, and is due to effusion within the synovial sac. The condition is due to septic poisoning, tubercle bacilli, lues, besides some other causes.

OPHTHALMOLOGY

1. Describe in detail how you would proceed to remove a small foreign body imbedded in the cornea.

The eye is cocainized; the patient is seated facing a good light, the surgeon standing behind and supporting the head; the lids are separated and the eyeball is steadied by the fingers of the left hand, the index-finger is applied to the upper lid, and the middle finger to the lower lid; the two fingers being separated while at the same time gently pressing backward. The instrument used is either the blunt spud, the gouge or the foreign-body needle. When the foreign body is of iron or steel the magnet should be used.

2. Define mydriasis; myosis. Name some drug which produces each condition. What is the Argyll-Robertson pupil? In what diseased condition is it found?

Mydriasis is the extreme, or abnormal, dilatation of the pupil. (Atropine, homatropine.) Myasis is excessive contraction of the pupil (Morphine, physostigmine.) The Argyll-Robertson pupil is one that reacts to distance but not to light. Found in locomotor ataxia.

OTOLOGY

1. How do you distinguish whether deafness is due to nerve lesions or aural lesions?

If the ticking of a watch or the vibrations of a tuning fork are heard only faintly or not at all when held at varying distances from the ear (aerial conduction), but become distinctly audible when the watch or the handle of the fork is placed in contact with the skull or mastoid process (bone conduction), the deafness is of the ordinary variety and due to aural disease. If, on the other hand, the sounds are heard indistinctly or not at all, both in contact and at a distance, the deafness is due to some lesion of the nerve or its connections. In the first case, the nerve is normal and can appreciate vibrations brought by the bone, while, through some fault in the mechanism, aerial vibrations are not transmitted to the nerve-endings. In the second case, the nerve is at fault and cannot appreciate vibrations, no matter how well they may be conducted.

PRACTICE OF MEDICINE

1. What are the remote effects of syphilis of the nervous system?

Locomotor ataxia, hemiplegia, paraplegia, monoplegia, arteriosclerosis, atheroma, interstitial nephritis, cerebral gumma, dementia paralytica, infarction, fibroid thickening of capsules of organs.

2. What are the symptoms of gastric ulcer?

Pain and hematemesis are the most important symptoms. Pain comes on soon after eating; localized in epigastrium, slightly to the left of the median line and radiating to the back, increased by pressure. Tenderness above and a little to the left of the umbilicus. Hemorrhage, acute or chronic. The hemorrhage may be quite profuse or there may be oozing. The color of the blood is usually bright red.

Give the symptoms of typhoid fever in the first, second, third and fourth weeks, and treatment of the same?

[The answer is omitted because it is necessarily so voluminous.—Ed.]

4. What are the symptoms of exophthalmic goiter and what are some of the measures employed in its treatment?

Prominent symptoms are dilatation of blood-vessels and frequently hypertrophy of the glandular tissue. The thyroid gland is enlarged and pulsates. There may be tachycardia, exophthalmos, spasm of the upper eyelid and widening of the fissure, twitching movements of the eyeballs, lagging of upper lid during downward rotation, tremors of the hands, besides general vasomotor disturbances, such as flashes of heat or serous diarrhea. Treatment is symptomatic and palliative. Rest and quiet; ice-bag to precordia; hydrotherapy; thyroid-, thymus-, and suprarenal-gland preparations, antithyroidine, and Beebe's serum may be used to good advantage. Excision of a part of the gland may be indicated in some instances.

5. Describe the symptoms of a case of chronic lead poisoning, and outline a method of treatment of this condition.

The patient is anemic; face is sallow or yellowish; there is a wasting of muscles; abdomen is rigid and retracted; a blue line is seen on border of the gums; there are present dyspepsia, a metallic taste in the mouth, coated tongue, fetid breath, and continued constipation. Wrist-drop and foot-drop, caused by paralysis of the extensor muscles and pains in the joints are among the complaints. Arteriosclerosis and interstitial nephritis may be present, as also cephalagia, convulsions, delirium, coma, and blindness from optic atrophy. Treatment: Iodides and opium are useful The iodides form soluble double salts with the lead in the tissues and thus aid in its elimination. Morphine may relax the spasm of the bowel, relieving intestinal pains and the constipation.

6. What are the early manifestations of pulmonary tuberculosis?

Early symptoms: Progressive muscular weakness, languor and lassitude, emaciation, loss of weight, fatigue on walking, climbing stairs or other exercise, slight temperature, loss of appetite, diminished expansive capacity of lungs, mucous râles

7. What are biliary calculi, their cause, and the treatment?

Gallstones are abnormal concretions occurring within the gall-duct or its passages and are composed, generally, of a nucleus of cholesterin, pigment or other substances surrounded by concentric layers of deposits of inorganic salts. They are insoluble in water, partly soluble in ether, chloroform, and alcohol. Generally they are friable, vary as to color, and consist of bile-acids, pigments, cholesterin, mucus, epithelium, fats, and calcium carbonate. The treatment in chronic cases is surgical, as a rule.

8. Describe the diagnostic significance of hematuria? Give etiologic factors. How would you differentiate as to whether bladder or kidneys are affected.?

Hematuria is diagnostic of disease of the kidneys, bladder or urethra. May be caused by traumatism or renal calculi. If the kidneys are affected, blood is intimately mixed with the urine, which is of a reddish-brown color and contains casts and renal epithelium. The red cells, having lost their hemoglobin appear yellow and are found singly. Hemorrhage from the bladder is more copious, blood is not intimately mixed with the urine, which, upon standing, shows fibrin. Micturition frequently is attended with pain. In lesions of the bladder (neck), only the last few drops of urine voided are bloody.

9. Explain the diagnostic significance of the knee-jerk.

Its presence proves the integrity of the reflex motor and sensory paths and is present in about 95 percent of normal individuals. It is a deep reflex, and its absence may prove that a disturbance exists in the spinal cord. Paths: Afferent, posterior root, fourth lumbar nerve. Efferent, fourth and fifth lumbar nerve.

10. Define leukemia, Addison's disease, myxedema, bradycardia, uremia.

Leukemia; a disease with great increase in leukocytes, enlargement and proliferation of lymphoid tissue of the spleen, lymphatic glands, and bone-marrow. The disease is accompanied by progressive anemia, internal hemorrhages, and profound exhaustion.

Addison's disease: A disease due to tuberculosis or degeneration of the suprarenal glands. Usually ends fatally. Characterized by a bronze-like discoloration of the skin, severe prostration, and progressive anemia.

Myxedema: a disease characterized by a mucoid infiltration into subcutaneous tissues evidenced by general dropsy-like swelling, especially of the face and hands. The swelling is hard and puffy; does not pit. Associated with atrophy of the thyroid gland and apparently is due to an excess of mucin in the system. Dulness of mental faculties, slow movements, unsteadiness of speech and gait are symptoms.

Brachycardia: excessive slowness of the heart-beat.

Uremia: the presence of urinary constituents in the blood, causing toxic conditions. Characterized by nausea, vomiting, headache, dim vision, coma or convulsions, and the breath and skin emanations are urinous in odor. Due to absorption of toxins which should have been eliminated by the kidneys.

JUST AMONG FRIENDS

A Department of Good Medicine and Good Cheer
for the Wayfaring Doctor

Conducted by GEORGE F. BUTLER, A. M., M. D.

THE blood, especially as regards its cells, constantly undergoes changes in its constitution. The red cells, particularly, undergo a phase of altruistic development whereby, like the embryonic tissues, they surrender their reproductive powers for the benefit of the nutrition of the organism. Arrest of development at a certain point, therefore, means a degeneracy whereby the old blood-cells gain, like a cancer, at the expense of the organism as a whole. It is this condition that essentially constitutes what is called pernicious anemia. The red blood-cell in this disease has the embryonic potentialities of the cell in cancer. The factors underlying this arrested cell development of the blood imply more elements than the simple incapacity to take up iron and act as a carrier of oxygen.

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The autotoxemia and constipation which constitute the great danger of pernicious anemia are clearly the products of more than the suboxidation due to the imperfect oxygen-carrying powers of the red blood-cells. There is, as any analysis of these cases will show, a toxemic element precedent to the pernicious anemia, which either arrests completely the proper development of the blood-cell, or which disappears, having produced merely temporary effects that disappear with it, as in the many cases of cures of alleged pernicious anemia resultant upon ameboid dysentery, malaria, syphilis, scurvy, diabetes and nephritis, and as exceptionally reported after yellow-fever, acute hepatic atrophy, cholera, and so forth. Here the primitive toxemia is the serious factor, not the resultant arrest of blood-cell development.

The blood-cells contain albuminous matter, as well as hemoglobin and fat. The supply of these, either directly or indirectly, through healthy nutrition, is absolutely necessary. The proper distribution of these substances, in relation to other elements, is likewise needed. The conditions leading to the removal of spanemia are best produced by the employment of alteratives, which improve the nutrition of the body without exerting any very perceptible action on its individual organs. Healthy nutrition depends upon a proper supply of oxygen and nutriment to each tissue and organ in the body, on the proper amount and kind of tissue-change in the various cells, and on the complete removal of waste. The proper supply of oxygen and of nutriment to the body generally will depend upon the state of the assimilatory and digestive organs. This necessary supply of oxygen to the tissues, as well as removal of waste from them, will depend upon the circulation, and the removal of waste from the body generally will depend upon the condition of the lungs, bowels, skin, and kidneys.

Arsenic has a very decided action upon tissue change and it markedly affects the glandular, nervous, respiratory, and cutaneous system. There is no better reconstructive tonic than the arsenates of iron, quinine, and strychnine—a combination that is invaluable in numerous conditions of debility, convalescence, anemia, chlorosis, and faulty metabolism.

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Another excellent tonic and alterative is copper. Copper is considered to be a violent poison, yet, except so far as its toxic effects as a foreign body in the eye are concerned, this repute is decidedly undeserved.

Kiernan has called attention to the fact that, among alchemic physicians, copper enjoyed a great reputation for what were later called "nervine-alterative" qualities, and it was used in epilepsy, chorea, and insanity, as Burton's "Anatomy of Melancholy" gives evidence. Its supposititious virtues led Paracelsus to make it the basis of one of his metallic tinctures. From him Rademacher took the therapeutic indications, and his tincture of the acetate of copper is employed by the eclectics today. That the Paracelsian use of copper was never completely abandoned by regular physicians is apparent from the perusal of the two first American Dispensatories, that of John Redman Coxe (1810) and the one of James Thacher (1812). In both of these works copper is recommended as an alterative tonic useful in epilepsy, chorea, and other spasmodic conditions, especially those connected with debility. Later therapeutists sustain this old belief.

According to Philips, J. V. Shoemaker, Biddle, Hare, Lauder Brunton, Potter, Culbreth, Foster, and others, the drug, in small doses, stimulates both the heart and the capillary circulation, and is a general nerve tonic. In the eighth and ninth decades of the nineteenth century copper assumed a new phase in periodic medical literature. Luton and Ligeois showed that copper was of value in chlorosis, anemia, cachectic states, and as a nervine alterative.

Some twelve or fifteen years ago, A. F. A. Price found that, while slow in action on the secondary symptoms of syphilis, copper prevented the development of mucous patches and throat symptoms. The first evidence of copper saturation of the system is stated to be a voracious appetite, followed by giddiness, vertigo, prostration, and other symptoms characteristic of occupational copper poisoning. As with other alteratives, Price had the best results from small doses frequently repeated. In cachectic states, 1-1000 grain of copper sulphate once daily had proved, in his hands, of marked value. Later, he confirmed and extended these results, showing the value of establishing copper tolerance in the pre-parasyphilitic stage.

As to the preparation to be employed, Redman Coxe, Thacher, as also Price, while finding copper sulphate of value, all agree that it has at times unexpected dangerous untoward effects when the point of saturation is reached. These untoward effects, through the influence of the drug on the vascular system, often take the direction of cardiac neuralgias and pseudo anginas.

The double salts of copper in small doses exert a cardiac action similar to that of digitalin, strophanthin, helleborin, etc. Hare prefers copper arsenite. I myself have found that under its use digestion and nutrition improve. It is superior to Fowler's solution in chorea and similar neuroses. Luton and Liegeois prefer a pill containing 1-6 grain of neutral copper acetate and 5-8 grain of crystalline sodium phosphate. For hypodermic use they employ a freshly made solution of copper phosphate, 1 part dissolved in 2 1-2 parts each of water and glycerin. The tincture of copper of the eclectics, which is the old Paracelsian tincture robbed of its crudities, has been employed in chlorosis, syphilis, chorea, epilepsy, neuralgia, and nervous adynamic states, in doses of 3 to 6 minims, frequently repeated, until the evidences of saturation already described appear.

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The therapeutic indications for copper, as assumed by Rademacher, are a grayish complexion, sunken features, small, soft, wiry pulse, light-colored, very acid urine, and early nerve symptoms, hallucinations, convulsions, delirium, etc. All of these symptoms are indications of what the older clinicians called nervous adynamia, a precursory suboxidation toxemic stage of neurasthenia.

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It is doubtful whether there could be compounded any better tonic-alterative intestinal antiseptic than the sulphocarbolate of copper. The copper, in itself, is a powerful antiseptic, and it acts as a stimulant of the functions of the gastrointestinal glands. In cases of autotoxemia, intestinal or otherwise, the alimentary canal should be cleared by calomel, podophyllin and laxative salines, to be followed

by phenol-free sulphocarbolates and copper arsenite, or, better, copper sulphocarbolate.

By this treatment the fetidity of the stools would be overcome, the secretory function restored, and the nausea, pain, diarrhea and other symptoms of gastrointestinal fermentation and autotoxemia removed. During convalescence the arsenates should be employed.

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In toxemic conditions, like secondary malarious manifestations, with the resultant pallor, copper and arsenic are of decided value. Cases in which the periodic tendency has disappeared improve decidedly under copper and arsenic, when quinine and iron alone are useless. The influence of arsenic is very marked on chronic rheumatism and socalled rheumatic gout, neuralgias of various sorts, in tic and hemicrania, as well as in angina pectoris, chorea, epilepsy, and asthma. In certain of the gouty forms of bronchitis, at the onset of phthisis, in imperfectly cleared-up pneumonic lung consolidation, arsenic acts, sometimes, with remarkable efficiency.

In the effects of arsenic and copper just detailed are to be seen the ideal action of the alterative, an action opposed in certain particulars to that of the restorative, to which category iron belongs.

Restoratives not causing tissue change must be placed in a condition for assimilation before the system can receive and apply them. If this does not occur, they act simply as poisons by overaccumulation, whence the many objectionable untoward effects which occur from iron in cases of spanemia, where this restorative agent is not assimilated. In chlorosis, where iron notoriously fails in many instances, copper and arsenic very frequently produce marked and decided improvement, not only as regards the red blood-cell, but also in general nervous vitality.

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The fact that arsenic acts as an excellent respiratory stimulant and tonic in mountain climbing, makes it peculiarly suitable in cases like chlorosis, where general air-hunger is marked, as in nephritic and diabetic cases. Indeed, in most spanemic states tissue air-hunger is a very unpleasant feature, sometimes underlying the condition of local exhaustion, and of local pain which provokes local exhaustion.

The fact that the organic irons succeed better than the inorganic is an indication that assimilation is necessary to the influence of a restorative, while an alterative of necessity provokes its own assimilation. Arsenic and copper have been found in small quantities in the thyroid gland, a fact that would indicate their natural presence as an alterative in the system.

The influence of both drugs on the liver, whose double functions are so necessary to the tissue changes of the system, shows that both drugs play a part in assisting assimilation and at the same time in destroying waste products. It must be remembered, as Minot, the embryologist, has shown, that the liver has two functions, one of which is a blood-making, and the other a poison-destroying one. The stimulation of both these functions is necessary to an alterative under the principles laid down.

It is obvious, therefore, that the liver should be functionating properly, the intestinal canal, kept free of toxic material, and free elimination maintained through the various channels, in order to obtain the best results from any tonic treatment.

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Prudes form a branch of the great human family, of whom this same family seldom has occasion to feel either particularly proud or greatly ashamed. They do no good that they are responsible for. They live; lead moral lives; are approved of as examples of good children; finally, are respected by other prudes and the owners of other prudes.

Should you become interested in one of the boys of this species, you will discover that he has been held aloof from other boys; was sent to a private school, a fond mother leading him there and calling for him; was ushered into business life by his mother, who saw to it that he was given a desk job and insisted that he must always live at the parental home.

And so he has always remained a real nice boy, who talks of "lovely times" and "horrid times." But he is a mellow, pink-fingered, immaculate, who never "is,"

but "is being"; who never "has," but "has been"; who is an absolutely passive existence. He hasn't a bad habit, because he doesn't know what a bad habit is.

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But at times, when his mother carelessly drops the leading string, he is made to look more like a real boy: his eyes are punched, his nose is tweaked, his ears are pulled, he is persuaded to roll in the dirt in order to take the "spanginess" out of his clothes; all of which makes him realize how dearly he loves his mother and causes him to remind her that she has dropped the precious string. He is unable to resist the attack of his tormentors, for he has been taught not to resist. Tears have been schooled to do the work of laughter. His muscles are flabby and his wind is short. He is a girl-boy, a mother's boy. He is a model boy without a bad habit, because his mother has made him an automatic, walking, talking being. He deserves no credit. He gets none.

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His opposite is quite as unsatisfactory to the world, and is the result of an equally disastrous thoughtlessness in those who are supposed to be his care-takers.

He is the boy who is allowed the loose rein of freedom, who is allowed to shift for himself; is ignorant of the meaning of the word restraint; knows no guiding hand; hears no loving word; seeks no advice; gets none. He knows the right, but he prefers the wrong. His liberty brings the animal to the surface and he acts the brute in preference to the man. In poverty, he is the ragamuffin, becoming the tough, the sot. In better circumstances, he is the bad boy, becoming the sport.

And the peculiarities of both of these may generally be traced to the wrong use of the right verb. "You shall not" has been used where "you should not" would have made thinking, reasoning boys of them. They have been commanded, not advised. In the one case the one commanded is robbed of all power to question; in the other, he cares not jot nor tittle.

Between these two grow the boys who make the men who make the world. They are the ones who have been taught the difference between right and wrong; who have had a gentle and loving but firm hand of restraint laid upon them, to guide them harshly but well; who had the right lesson of self dependence, with copious notes on standing up for their own rights.

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Grit, with a little vinegar and some ginger, goes a long way toward helping to make a boy presentable in this world of ours. If he has them, don't attempt to take them from him. If he lacks them, do your part to put them into him. Teach him to realize before he is out of his petticoats that whining is unprofitable. Toady to his bump of affection, but teach him that the puppy stage should be outgrown. Impress upon him that, when he gets a few more years and inches, he will be a man to do a man's work; that pluck, perseverance, and push are trouble-shakers; that sound wind, good courage, and a rugged constitution are boon-companions to a healthy brain. Point out to him the right way, and teach him that a part of the task of going that way must fall upon himself. Teach him that to respect himself is to be respected.

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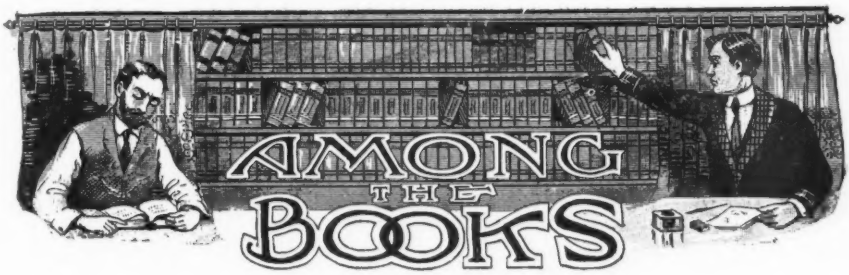
If he has a desire to smoke, advise him not to. If he is determined to smoke, make the best of it. Open the whole house to him, his pipes, cigars and all. The house is his as much as it is yours, and it is a better place for him than behind the barn. If he wishes to play cards, teach him that card playing is not necessarily gambling, and that when he is playing whist and euchre, he is doing nothing wrong. Should he desire to dance, avoid the common canard of the many anxious ones. Teach him, instead, that on the dance-hall floor there are girls of absolute respectability. Should drinking have an inclination to woo and wed him, settle yourself right down to have a vigorous campaign on any lines you choose. Break him!

Bear in mind that the lessons remembered the longest by him are those taught him by *you*. Be frank to him, would you have him frank; be honest, would you have him honest; be firm, would you have him firm. Be master, not man.



DIEULAFOY'S "TEXT-BOOK OF MEDICINE"

A Textbook of Medicine. By G. Dieulafoy, Professor of Clinical Medicine at the Faculté de Médecine de Paris. Authorized English translation from the fifteenth edition, by V. E. Collins, M. D., and J. A. Liebmann, Ph. D. New York: D. Appleton & Co. 1911. Price $12.00.

Dieulafoy's Textbook is a work of two volumes and has been written with a special consideration of the needs of the general practitioner.

Volume I is devoted to diseases of the respiratory system, the circulatory system, and the digestive system. In Part I the author has given a complete picture of the tuberculous process as it affects the various organs, embracing the anatomic, clinical, diagnostic, prognostic, therapeutic, and prophylactic considerations. The perfectly systematic and interesting way with which he writes, not only of tuberculosis, but of other diseases as well, makes the chapters nothing less than a pleasure to peruse. Tuberculin therapy and other up-to-date measures for combating this disease are concisely presented. Part III of the first volume is devoted to diseases of the digestive system—511 pages in all—and every page is treated in a most satisfactory manner. The part devoted to diseases of the intestine shows painstaking preparation, the discussion of appendicitis being most exhaustive, embracing 42 pages. Differing from the writings of the average internist, Dieulafoy is most pronounced in his opinion of the value of surgical over medical treatment of appendicitis, as, when he truly says, and with emphasis:

"*There is no medical treatment for appendicitis.* Medical treatment simply causes loss of valuable time. It is obvious that the patient can be relieved by injections of morphia, application of ice-bags to the affected region, and other soothing measures; but do not let us be mistaken as to the efficacy of these means. Too often they lead us to believe in cure, when they only mask the symptoms. In view of this fictitious improvement, we speak of typhlitis or appendicular colic, and prophesy recovery; but the patient dies for want of proper surgical intervention. Since this focus (appendicular) is the cause of the disease and of death, would not early surgical intervention be better than ice, purgatives or opium?"

Fifteen pages are devoted to diseases of the pancreas. The author evidently has carefully reviewed the recent and abundant literature, by virtue of which, together with his clinical experience, he is enabled to clear up many obscure points in diseases of this organ. The pathology of the pancreas has been much simplified, but it is to be regretted that the symptomatology is still quite obscure and the treatment correspondingly unsatisfactory. The portions treating on hemorrhage of the pancreas, on pancreatic colic, relation between pancreatitis and gallstones (pancreaticobiliary syndrome), cytosteatonecrosis, and pancreaticoperitoneal hemorrhage have received a most thorough consideration. The whole subject, indeed, represents the most careful work on the part of the author, making it possible for the interested reader to acquire a complete knowledge of the diseases of the pancreas.

The second volume is equally interesting and exhaustive. It is devoted to diseases of the urinary system, the nervous system, general and infectious diseases, diseases of the spleen, pathology of the blood, rheu-

matic and dystrophic disease, parasitic infections, diseases affecting the locomotor system, venereal diseases, the intoxications and supplementary chapters on therapeutics, devoted to the treatment of syphilis by mercury and arsenical preparations, and three pages given to formulas for and injection of artificial serum.

The section on diseases of the nervous system embraces 352 pages. This portion of Volume II will bear very careful reading and cannot fail to be of more than usual value. Somewhat of the great difficulty that has long hung over certain aspects of diagnosis of diseases of the nervous system is largely removed by the clear and terse treatment they receive at the hands of the author.

Indeed Dieulafoy's "Textbook of Medicine" elucidates the complex problems of detecting disease in a most complete, profound, and clear manner. One is led, in the most pleasing language, from step to step in diagnosis until the hidden conditions are revealed and disease is compelled to yield up its secrets and lay bare the morbid changes it has caused. The therapeutic sections, while perhaps sufficiently complete for the experienced practitioner, show less painstaking consideration than is given to the other portions of the work.

The graphic method is made free use of, the volumes being profusely illustrated with well-chosen cuts. Each chapter is followed by several case-reports illustrative of the subject under discussion, thus greatly enhancing the value of the work. The translation is accurate and fluent—the style of the text being really delightful, easy, and vivid.

Altogether, the whole work shows a painstaking preparation to the end of producing a most useful up-to-date and complete textbook of medicine.

GEO. F. BUTLER.

HOLT'S "CHILDHOOD DISEASES"

The Diseases of Infancy and Childhood. For the Use of Students and Practitioners of Medicine. By L. Emmet Holt, M. D., Sc. D., Assisted by John Howland, A. B., M. D. Sixth edition, fully revised. New York and London: D. Appleton & Co. 1911. Price, cloth, $6.00.

The present edition of Dr. Holt's well-known textbook of Pediatrics was prepared with the assistance of Dr. Howland, who will hereafter be connected with the work as joint author. The work has been thoroughly revised, many chapters being rewritten, and several new articles have been added. We are glad to announce this new edition to our readers and hope that it will gain as many new friends as did its five predecessors in their time.

CHUNDRA'S "TREATMENT"

A Treatise on Treatment. By Jogender Lal Chundra, L. M. S., Calcutta University. Published by the author at 5 Gopee Kristo, Pauls Lane, Calcutta.

This is one of those "different" books, and it attracts attention by virtue of its unique presentation of a subject that ordinarily is dealt with in a stereotyped manner. The author evidently has been an omnivorous reader of medical literature and, in the process of assimilating knowledge, has formed ideas of his own. Thus, associated with a curiously varied collection of formulas, he presents excerpts from monographs, methods of treatment, and theories of therapeusis.

The volume unquestionably contains a great deal of useful information, but, unfortunately, the reader is compelled to read many things and select therefrom that which he considers desirable. It is to be hoped that in another edition the subject-matter will be better balanced: widely varying theories emanating from individuals of world-wide celebrity, when presented side by side and shorn of explanatory or qualifying remarks, are apt to confuse rather than help the puzzled practician. For instance, under the head of "Appendicitis" the use of opiates (and leeches) is "strongly recommended"; yet Osler and McCrea are quoted in the next paragraph as saying that "the use of opium in the treatment of appendicitis is generally discredited." Lockwood's dictum, "It is better *not* to apply leeches," appears immediately following a paragraph saying,

"Half a dozen leeches work like a charm." Such confusing "conflictions of authority" occur constantly, and one is compelled to realize that, having paid his money, he is left to take his choice of a heterogeneous mass of therapeutic material

Notwithstanding its various weak points, however, the book is well worth reading, the chapters on tropical dysentery, cholera, tuberculosis, diabetes, and syphilis being of particular interest, while, in discussing "fever," the latest theories are intelligently considered.

EBERHART'S "HIGH-FREQUENCY MANUAL"

A Working Manual of High-Frequency Currents. By Noble M. Eberhart, M. S., M. D. Chicago: New Medicine Publishing Company. 1911. Price, postpaid, $2.00.

This latest book by Dr. Eberhart is a practical handbook for the busy physician who wishes to use high-frequency currents and to learn how to do so with as little "red tape" as possible. The author does not indulge in theory, but sticks to established truths, and where facts are not yet fully explained, he presents his own solution of the problem briefly and concisely. The theoretical portion of the book, that dealing with the nature and application of high-frequency currents, occupies just one-half of the volume, while the chapters on practical high-frequency therapy take up the remainder. The author has succeeded in presenting an enormous amount of information in a small space, and his little book is certain to be of great benefit to many physicians.

VISITING LISTS

The Practitioner's Visiting List for 1912. Philadelphia and New York: Lea and Febiger. Price $1.25 net; with thumb-index, $1.50.

The Practitioner's Visiting List, which is as usual published in various styles, contains thirty-two pages of data needed by every practitioner, as well as the blank pages for recording all details of practice, both clinical and financial. The book before us shows the handsome appearance to which we are accustomed.

"THE FOURTH PHYSICIAN"

The Fourth Physician. A Christmas Story. By Montgomery Pickett. Chicago: A. C. McClurg & Co. 1911. Price $1.00.

One of the most charming and delightful Christmas stories that it has been our privilege to read for a long time. Speaking directly to physicians, and contrasting the altruistic work of the lowly practitioner with the impersonal research and study of "cases" of the scientist, who nevertheless cannot deny himself to the purely human touch when the right chord is struck, the little story, so full of human life, carries a strong and appealing message. A bright and even amusing turn is given to many passages by the quaint philosophy and the childlike faith of Uncle Hilary, the old negro servant, who has "often observed that nothing is so strong in sickness or health as a good prayer with the right proportion of effort behind it," and for whom "there is no real sympathy in the world without effort behind it."

A. M. A.'S "NEW AND NONOFFICIAL REMEDIES"

New and Nonofficial Remedies, 1911; containing descriptions of articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association, prior to Jan. 1, 1911. Price, paper, 25 cents; cloth, 50 cents.

This is the 1911 edition of the annual New and Nonofficial Remedies, issued by the Council on Pharmacy and Chemistry of the American Medical Association, and contains descriptions of all articles approved by the Council, up to Dec. 31, 1910. There are also descriptions of a number of unofficial nonproprietary articles which the Council deemed of value. The action, dosage, uses, and tests of identity, purity and strength of articles are given.

In the arrangement and the scope of individual descriptions, the present edition does not differ widely from the 1910 edition,

but it contains about 25 additional pages, these being required to describe the articles accepted by the Council during 1910.

Besides indicating to physicians the proprietary articles which the Council's examination has found to be honestly marketed, and containing accurate descriptions of these articles, all similar articles are arranged under group headings. Thus the physician at a glance can learn that atoxyl and soamin are practically identical articles, and that arsacetin is a closely related body. Again, the several proprietary solutions of the blood-pressure-raising principle of the suprarenal gland are listed under the general tite "epinephrin," and the manner in which the solutions differ from each other can be learned at a glance. In the same way, the medicinal foods are brought together and their relative values compared.

VISITING LISTS

The Medical Record Visiting List or Physicians' Diary for 1912. New Revised Edition. New York, William Wood and Company. Price $1.25 to $4.00 according to style.

This well-known visiting list contains, besides the usual information, a list of maximum adult doses, by mouth, of the drugs in common use, both in Apothecaries' and metric measures. Those drugs which are included in the U. S. Pharmacopeia have an asterisk. Another list gives the difference in "drops" as dropped from bottle or dropper in actual minim measure, showing that minims should always be prescribed for the sake of exactness. The diary shows the customary arrangement.

HORDER'S "CLINICAL PATHOLOGY"

Clinical Pathology in Practice. With a Short Account of Vaccine Therapy. By Thomas J. Horder, B. Sc., M. D., F. R. C. P., London and New York: Oxford Medical Publications. 1910. Price $3.00.

This is a rather novel and certainly very timely treatise on diagnosis, so far as this is aided by the laboratory worker. The book is neither a textbook on pathology nor a manual detailing the methods and technic of laboratory examinations. It discusses rather those classes of cases that will repay laboratory examination, and indicates the materials that are necessary for the purpose; it describes the methods by which these materials are obtained, and considers the interpretation that is to be put upon the results of the investigation. It is, therefore, a welcome guide for the physician, to determine when and how he should invoke the assistance of the pathologist in order to determine the exact condition of his patients.

SHERMAN'S "VACCINE THERAPY"

Vaccine Therapy in General Practice. By George H. Sherman, Detroit, Michigan. 1911. Published by the author.

This little volume, which was distributed by the author among his correspondents, contains a number of papers on the important subject of biologic treatment of infectious diseases, and will, we are informed, soon be issued in a second edition, which will then sell for one dollar.

The author has studied the subject with which he deals for many years and speaks from his wide experience. While we are fully in accord with his desire to increase the interest in the use of bacterial vaccines in everyday practice, we do not agree with him in all points, and take decided exception to his categorical statement (page 29) that vaccines are not dangerous. Vaccines have a greater possibility for harm than chloroform, morphine, strychnine, and other drugs of the kind. They are not dangerous in the hands of men who have studied their actions and the principles underlying their application, because then their administration is controlled.

Dr. Sherman's little book contains much interesting information and can be cordially recommended for study.

"INTERSTATE MEDICAL-SYMPOSIUM SERIES"

Recent Studies of Syphilis, with Special Reference to Serodiagnosis and Treatment. Second edition, revised. A reprint of articles published in *The Interstate Medical*

Journal. St. Louis: Interstate Medical Journal Company. 1911. Price $1.00.

Recent Studies of Cardiovascular Diseases. A reprint of articles published in *The Interstate Medical Journal*. St. Louis: Interstate Medical Journal Company. 1911. Price $1.00.

These two books present, each on its respective subjects, a series of papers containing an enormous amount of information on the most recent studies and investigations. The contributors to *The Interstate Medical Journal* rank among the best-known medical writers, and their papers are all of them of interest and value.

We are glad to call the attention of our readers to the medical-symposium series published by *The Interstate Medical Journal*, of which the present volumes are the first two issued, and which, we suppose, will be continued.

ABRAMS' "THE BLUES"

The Blues, or Splanchnic Neurasthenia: Causes and Cure. By Albert Abrams, A. M., M. D. (Heidelberg), F. R. M. S. Illustrated. Fourth edition, revised and enlarged. New York: E. B. Treat & Co. 1911. Price $1.50.

The important work of Abrams in establishing and elucidating the abdominal form of neurasthenia as a clinical entity, of showing the important causal relation to it of intestinal autointoxication, and of suggesting a proper and effective line of treatment is well known and acknowledged. His book, "The Blues," has become a reliable guide to many physicians in dealing with these puzzling conditions, and any new edition which promises further light on the subject must be welcomed.

TALBOT'S "DEVELOPMENTAL PATHOLOGY"

Developmental Pathology: A Study in Degenerative Evolution. By E. S. Talbot, M. D. Boston: R. G. Badger. 1911. Price, buckram, $6.00.

Teratology, in an extended sense, came into pathology very early. Rash's conception of insanity predisposition is a teratologic rather than a nosologic one.

Developmental pathology is the domain of pathology, in the Virchowan sense, of disturbance of balance which deals with departures of structures and organs from the normal along the line of fetal arrests, either in structure or else in the biochemic states underlying functions or potentialities of development, at given periods of growth. Atrophies, with or without resultant hypertrophies, and *vice versa*, are underlain by its laws. Dr. Talbot's object, tersely stated, is to show in this book:

First, that the ontogeny of man—his structures and organs—is a modified recapitulation of his phylogeny in development.

Second, that, as the vertebral phase appears early in embryogeny, an unstable nervous system, checked by parental defects, eruptive fevers, and other agencies at the periods of stress in the child, affects phylogeny and ontogeny.

Every phase of teratology in its medical relations is excellently discussed from the embryogenic, and not the freak viewpoint. This latter viewpoint curses much of the more recent discussions with needless misleading ambiguity. The views advanced forty years ago by E. C. Spitzka, in his "Somatic Etiology of Insanity," are extended to other phases of medicine than psychiatry. The work, happily, comes at a time when it is much needed. Like all of Badger's publications, it is well issued in the typographic sense.

JAS. G. KIERNAN.

KOLLE'S "PLASTIC SURGERY"

Plastic and Cosmetic Surgery. By Frederick Strange Kolle, M. D. With one colored plate and 522 illustrations in the text. New York: D. Appleton & Co. 1911. Price $5.00.

This is an unusually interesting work, covering, as it does, a subject that ordinarily is rather neglected, at least in part, and left to beauty-doctors. Attention to plastic and cosmetic surgery should, we believe, offer a most grateful and remunerative field for surgeons with deft fingers and

mechanical ingenuity, because many are the objections on the part of both men and women to the features with which nature has endowed them or which disease may have left them, while plastic operations command good fees.

Dr. Kolle has treated his subject in a very attractive and complete manner and has given us much interesting information on the history of plastic surgery (which is far older than the reviewer believed) and on its present scope. The chapters on the theory and practice in particular are decidedly well written. The book is certain to be of value to the plastic surgeon, and just as valuable to the practitioner who is usually consulted first, before a surgeon's services are requested.

PRACTICAL MEDICINE SERIES, 1911

The Practical Medicine Series; Comprising 10 Volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head, M. D., and Charles L. Mix, A. M., M. D. Chicago: The Year Book Publishers.

Readers are reminded that, while the price of the year's set of 10 volumes is $10, each volume may be purchased separately, at a cost of from $1.50 to $2 each. The following volumes have been received by the reviewers, viz.:

General Medicine. Edited By Frank Billings, M. S., M. D., and J. H. Salisbury, A. M., M. D. Series 1911, Vol. 1. Price $1.50.

General Surgery. Edited by John B. Murphy, A. M., M. D., LL. D. Series 1911, Vol. 2. Price $2.00.

The Eye, Ear, Nose, and Throat. Edited by Casey A. Wood, C. M., M. D., D. C. L.; Albert H. Andrews, M. D., and Gustavus P. Head, M. D. Series 1911, Vol. 3. Price $1.50.

Gynecology. Edited by Emilius C. Dudley, A. M., M. D., and C. Von Bachelle, M. S., M. D. Series 1911, Vol. 4. Price $1.25.

Obstetrics. Edited by Joseph B. DeLee, A. M., M. D., with the Collaboration of Herbert M. Stowe, M. D. Series. 1911, Vol. 5. Price $1.25.

These five volumes comprise the first half of this excellent annual series, which enables the practitioner to keep himself informed on the advance in medical knowledge during the preceding year. The text of the present volumes is fully up to the standard established for this annual from the beginning, and the selection of the matter shows careful and studious work. The series is primarily intended for the general practician, but affords much of value to the specialist as well.

WALSH'S "PHYSICIAN'S HANDY LEDGER AND CALL BOOK"

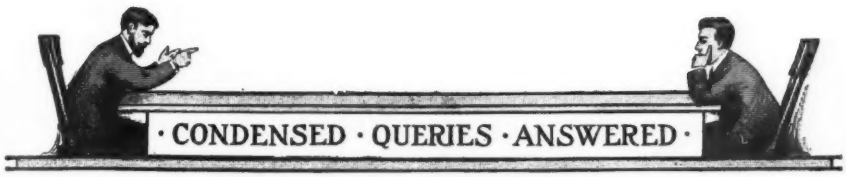
An excellent combined set of physicians' account books is provided in Walsh's Physician's Call-Book and Walsh's Physician's Handy Ledger. The first is much like the usual "visiting list"—a handsome, morocco-bound pocket-book with flap, containing blank pages for recording calls and charges, and the dose table and other emergency information ordinarily supplied in such books. This is the day-book of the system. The Handy Ledger is 7 by 10 inches and is so arranged that the record of visits made in the call-book may be transferred to it by a stroke of the pen, thus reducing the work and trouble of keeping accounts "charged" to a minimum. One page in the ledger gives ample room for recording a patient's account for a year or more.

The price of the Call-Book is $1.50; of the Ledger, for 600 patients, $3.50 and for 1200 patients, $7.00. Address Ralph Walsh, M. D., 1807 H. St., Washington, D. C.

NUNN'S "MATERIA MEDICA"

Materia Medica Step by Step. By Arthur W. Nunn, F. C. S. Philadelphia: P. Blakiston's Son & Co. 1911. Price $1.40 net.

This little volume is not intended as a work of reference, but rather as an introduction into the study of materia medica. While really for the beginner, it will be found most interesting and useful to the physician.



PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWER TO QUERY

ANSWER TO QUERY 5734.—"Electricity in Goitre." In your answer you recommend solution of potassium iodide locally by cataphoresis. In regard to this, allow me to repeat what years ago I read somewhere and which I have faithfully observed since then, in treating goiter by the galvanic current. It is this: "Before attempting to treat a goiter by galvanism, no matter if there is exophthalmos or not, examine the heart carefully, and if even the slightest indication of a lesion exists, never use the negative pole."

It is this precaution I wish to mention, although I do not exactly know what might be the consequences of not heeding it.

BROTHER COSMAS, O. S. B.

Conception, Mo.

QUERIES

QUERY 5755.—"Corneal Ulcers." A. F., Illinois, has under treatment a case of "corneal ulcer" in a patient forty years of age and who has been under observation and treatment for now seven years. The ulcers appear first on one eye then the other, at various times, probably six or seven times during the year; in summer or winter, whether the patient has a bad cold or when he is, apparently, perfectly well. They are sometimes deep and at time superficial, but always incapacitate the eye for several days, being accompanied by much pain, lacrimation, photophobia, and so on. This man has, on several occasions, been sent to oculists, for correction of errors of refraction. He has been on "special courses of treatment" for long periods of time, i. e. he has taken potassium iodide, mercury, and sodium cacodylate. There is absolutely no history or manifestation of a luetic taint. His vision, corrected by lenses, is all right. He has had but one sickness besides measles; that was typhoid fever at the age of twelve years. His general physical condition is practically perfect. He is naturally very much discouraged at the outlook, since there seems to be no let-up to the appearance of the ulcers.

The doctor asks whether we or any of the "family" can suggest measures to prevent the recurrence or to eliminate the cause of this distressing condition.

You do not describe the local conditions very fully. Neither do you state whether the invading bacteria have been recognized. Among the commoner causes of corneal ulcer may be mentioned purulent conjunctivitis, blennorrhea of the lacrimal glands (you may be dealing with a constant infection here), a lowered state of the general system, autoinfection (from the alimentary canal especially), and disturbances in the nerve supply of the cornea. Photophobia, lacrimation, and blepharospasm are observed in practically every case. The pain may be severe and affect not only the eye but the brow, temple and side of the head. In unfavorable cases pus or fibrin collects

in the lower part of the anterior chamber (hypopyon).

There is a very great difference in the behavior and tractability of corneal ulcers. In some instances they are uncontrollable and tend to go from bad to worse in spite of the best efforts of the physician. Then, again, they respond promptly to treatment. The usual classification of "infected" and "simple" ulcers can not be considered rational, for even the mildest ulcer is infected in the sense that some bacteria are present and play an important part in the production of the lesion.

The extent and malignancy of the ulcer depends to a great extent upon the nature of the bacteria, and to some degree upon the character of the biologic opposition—feeble or pronounced—which they encounter in their invasion. A patient whose general vitality is lowered offers less resistance than a robust individual to even the less virulent bacteria, such as staphylococcus pyogenes aureus, and when such an individual suffers from a streptococcus, pneumococcus or Klebs-Loeffler bacillus infection, the ulcers are apt to exhibit great malignancy and to tax one's therapeutic capacity.

You will readily see that in this case it is essential to increase resistance, to correct any disorder of the body-chemistry, and to familiarize yourself with the nature of the bacteria invading the cornea. Send a smear of discharge from the ulcer and also a blood smear, together with a specimen of urine (4 ounces from the total 24-hour output, stating that amount), to our pathologist for examination. The patient is most likely acidemic. Is there any discharge from the lacrimal duct, or does a nasal catarrh coexist?

We should be inclined to give this patient, once a week, a calomel-podophyllin purge, i. e., calomel gr. 1-6, podophyllin gr. 1-6, bilein gr. 1-12, every half hour for four doses at night, and a saline draught the next morning. By thus emptying the alimentary canal, you will do much toward ridding the system of intestinal putrefactive bacteria and their toxins. Give the sulphocarbolates or calcium sulphocarbolate every three hours; the arsenates (preferably with nuclein) after meals, and echinacea, 1 grain three times a day. Keep the skin thoroughly active and the nasal and buccal cavities clean; and should an ulcer appear, push quinine (preferably in the form of the hydroferrocyanide), and give, hypodermically, 30 minims of nuclein solution daily for ten days.

Locally, atropine, or boric acid, solution, or the yellow oxide of mercury ointment, will prove beneficial. Or you may use a solution containing 1 grain of atropine and 10 grains of boric acid to the ounce. Follow with the application of yellow oxide of mercury ointment, 1 grain to 1 dram of vaseline. If pain, photophobia, and lacrimation are complained of (and are excessive), employ a strong solution of atropine (4 grains to the ounce). Occasionally atropine does not act favorably, and here holocain, 2 grains to the ounce, proves the better preparation, markedly relieving pain and promoting healing of the ulcer.

Foul ulcers which refuse to heal may be controlled by an application of pure carbolic acid. First cocainize the eye; then, with a finely pointed wooden toothpick about the tip of which a few fibers of absorbent cotton have been wound, apply, with a rubbing motion, the phenol to the affected area. Be quite sure that an excess of the acid is not taken up. After the phenol has been in contact with the ulcer for a few moments, apply pure alcohol in precisely the same way, after which wash the eye with normal salt solution or a saturated solution of boric acid. Should the ulcer present a foul appearance after twenty-four hours, repeat the application. The lids must, of course, be held open during this procedure, and each step must be taken with extreme care. We trust you will report your further experience.

—

QUERY 5756.—"Varicose Veins of the Leg. Phleboliths." F. B. W., California, requests information regarding the operation for varicose veins. His patient is a young lady about twenty years of age; somewhat neurotic; inclined to faint and to emotional spells. She has slight lateral spinal curvature. Claims not to be constipated. The trouble affects the veins running from the buttocks to the knee, one

being the vein from the great saphenous. Our correspondent inquires whether there is any better operation than Phelp's ligation and severing the vein a number of times. Also what is the best treatment for phleboliths. The patient is very susceptible to iodine.

We regret that you present such limited clinical data. Varices are rarely seen in the locality you mention, and we cannot quite understand what should cause such a condition in so young a single woman. Were we more familiar with the nature of the spinal deformity and had we some knowledge of circulatory conditions, we might be able to explain the phenomenon. We suggest that you have the blood pressure tested.

As you are well aware, a number of etiologic factors contribute to the development of varicosities, but, unless an inflammatory condition has existed or a congenital thinness of the walls of the veins and insufficiency of the valves obtains, we should hardly expect to find varicosities about the buttocks and thighs of an individual of this age. You do not mention any history of trauma. Before any operation is done, we should advise that you familiarize yourself as fully as possible with the internal abdominal and pelvic conditions. The urine should be examined and heart-sounds carefully noted. If the varicose condition is not very pronounced and the veins assume a normal appearance when the patient lies down, we should hesitate to operate. You must also ascertain whether the deep veins are involved, or the superficial only. Is there any edema whatever, or does the patient complain of muscular contractions and neuralgic pains? If the varicosities have appeared lately, search for a tumor.

In varicose veins of the extremities a thorough resection of the diseased veins or ligation and resection of the long saphenous vein at the saphenous opening is recommended. Mayo has devised an instrument, called a "vein-stripper," which permits of the subcutaneous removal of the greater part of the varicosed vessel. The vein is exposed through a transverse incision, cut, ligated, and threaded upon the instrument. It is then separated from the tissues and the collaterals are broken by forcing the stripper along the vein. Another incision is made over the end of the instrument, the distal portion of the vein ligated and the separated part removed. Such an operation should be performed only by a thoroughly competent surgeon, while the patient demands careful nursing and constant attention for at least two weeks thereafter.

Phleboliths rarely form in the vessels of individuals under fifty years of age. If they are small and do not cause annoyance or disturbance of the blood stream, they may be left alone. As a true phlebolith is a calcified thrombus, it is practically impossible, of course, to influence it by medication or local treatment. The concretion must be removed together with a small portion of the varicosed vein. Should you desire to study the subject further, see any of the larger modern works upon surgery. If, however, we can answer any specific question, do not hesitate to write again.

—

QUERY 5757.—An Extraordinary Case of Typhoid Carrier. H. M. M., Kansas, recently forwarded to our pathologist a specimen of bile which he thought promised to show a very interesting condition. The specimen, he informs us, "was secured from a lady operated upon for gallstones about eight years ago, but the wound never healed, and about two months after the operation she had typhoid fever. Since that time she has been in good health. One day this past summer she entertained some twenty or twenty-two ladies, and every one of them had typhoid fever, caused, as I believe, by eating pressed chicken at her table. We have a reason for believing that the chicken was infected from the bile coming from this patient. It is also thought this woman is throwing off typhoid bacilli in almost pure culture. It is such an important case that verification by you is desired."

The report of our pathologist has fully verified our correspondent's suspicion. The bacillus typhosus was found in enormous numbers, being practically a "pure culture" (one-fourth of the bile-material). This is unquestionably one of the most remark-

able cases that has come under our observation.

Do we understand that the twenty-two guests contracted typhoid fever subsequent to partaking of a chicken dinner at the patient's home at the same time? Under any circumstances it would seem that several chickens would have to be infected, and we should like to learn just how they gained access to the bacteria-carrying. agent. At the present time your patient is about as dangerous in the community as a bunch of healthy rattlesnakes. It would be interesting to investigate other cases of typhoid fever that may have occurred in the neighborhood during the past five years, and we await with much interest your further report.

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QUERY 5758.—"Arteriosclerosis. Atheroma." W. H. L., Ontario, believes that by giving the symptoms and characteristics of arteriosclerosis, and differentiating it from atheroma, we should aid many of our subscribers.

As a matter of fact, the majority of writers have used the terms "atheroma" and "arteriosclerosis" interchangeably, and most medical men speak of an atheromatous or arteriosclerotic condition as if they were the same. This, however, is a mistake.

Atheroma is differently defined in the various dictionaries. Perhaps the best definition appears in the Century Dictionary, which describes this condition as "the formation of thickening patches on the inner coat of an artery (more rarely of a vein), constituting cavities which contain a pasty mass exhibiting fat globules, fatty-acid crystals, cholesterin, more or less calcareous matter, etc., the endothelial film separating this from the blood and the atheromatous ulcer formed."

The derivation of the term "atheroma" is from a Greek word meaning "gruel." It is evident that the term as commonly used, to designate a hardening of the arteries, is employed in quite a different sense from the original.

It has grown to be the custom in recent years to designate by the word "atheroma" most of the changes in the lining of arteries which can be distinguished with the unaided eye, including abscesses, ulcers, thickened patches, and calcareous deposits. In short, practically every disorder of the lining of the blood-vessels which can be detected without the microscope.

Dieulafoy, in his recently published "Textbook of Medicine," under the head of "Toxic Arteritis, Atheroma, Arteriosclerosis," groups all arterial lesions consecutive to pathogenic agents, to their toxins, and to vegetable or mineral poisons. He says that when an artery is affected by endoperiarteritis which diminishes its caliber and changes it into a fibrous tube, arteriosclerosis is present. If the tunica intima is affected, but only in the layers subjacent to the endothelium, with the formation of yellowish, cuplike patches filled with a fat pulp, we have atheroma to deal with. If the fluid and fatty matters are reabsorbed, then the lime salts alone remain, and the patch assumes a rigid consistency, while such atheromatous centers existing in great numbers in the same vessel finally fuse and give to the artery, or a large portion thereof, a cartilaginous or ossiform rigidity. This condition has been spoken of as "ossification of the arteries," though the term is not a correct one.

When the whole arterial system is invaded, atheroma chiefly affects the large arteries, while arteriosclerosis develops by preference in the visceral arterioles. Two changes in the vessel are produced by arteriosclerosis: (1) periarterial inflammation, which proceeds by foci in the centers of which a diseased artery is found (inflammatory sclerosis); (2) a lesion of degeneration in which sclerotic foci are formed at a long distance from the diseased vessel. Sometimes these changes are found side by side. (Mixed sclerosis.)

Of the symptoms of atheroma and arteriosclerosis, some are due to the arterial lesions themselves, others to the visceral changes which they produce. Among the former may be cited the rigid character of the arteries, the increase of arterial tension, the tortuous course of the arteries, the second heart sound, which is accentuated and which has a ringing character, and the frequency of purpura and gangrene of the extremities. Among the troubles

due to visceral changes are vertigo, hemiplegia, aphasia, loss of memory, failing intelligence or complete dementia. In some patients the heart is chiefly affected, and we shall note palpitation, cardiac hypertrophy, angina pectoris, and paroxysmal dyspnea. Again, patients will complain of loss of appetite and of indigestion. In not a few cases renal changes call attention to conditions, insufficiency of urinary depuration and the various symptoms of Brightism indicating frequently the existence of a sclerosis.

The treatment of atheroma and of arteriosclerosis is practically identical. Remedies lowering the arterial tension should be exhibited, together with the iodides or iodine in some form. It is frequently desirable to place the patient upon a milk diet.

For further information upon this subject, upon which volumes and volumes have been written, we refer to Meig's "Human Blood-Vessels." or any modern work upon diseases of the circulatory system.

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QUERY 5759.—"Compatibility of Calx Iodata." B. M. W., Pennsylvania, wishes to know whether calcidin is "as compatible as potassium iodide? Can it be combined with tincture of lobelia, compound syrup of sarsaparilla, or with ammonium carbonate or chloride?"

Calcidin, like potassium iodide, is compatible with syrup of sarsaparilla and also with ammonium chloride. The addition of ammonium carbonate would cause a precipitation of calcium carbonate. It would not be advisable to combine tincture of lobelia with calcidin. The alkaloid lobeline would unquestionably be precipitated.

—

QUERY 5760.—"Pyelitis and Chyluria." W. C., Texas., has, as he writes, a case of pyelitis or chyluria. The patient's urine is milky. The patient has been treated by several doctors. He asks whether we can suggest anything to put him on the right track.

There is a vast difference between pyelitis and chyluria. The treatment which would prove effective in one disease would be detrimental in the other. We, therefore, suggest, Doctor, that you send a 4-ounce specimen of urine to our pathologist. It might be well, also , to send a blood smear. Examine the patient (who perhaps harbors the filaria sanguinis hominis) carefully and report conditions fully.

It must be remembered that chyluria is intermittent in appearance, especially in the parasitic varieties. Pyuria is also sometimes intermittent, the urine usually being acid, unless a cystitis also obtains, when the presence of pus-corpuscles is readily revealed by the microscope. In chyluria we do not find pus, but sometimes albumin, fibrin, and fat.

—

QUERY 5761.—"Aconitine." S., Iowa, wishes to be informed in regard to aconitine. He asks: "Can it be given safely as long as a patient has fever, say 102° F., and over? I am using the granules, in connection with other treatment, every three hours, as one dose of aconitine is entirely eliminated within that time. The patient is a man suffering with pneumonia, and I am unable to bring the temperature down to anywhere near normal. Can aconitine be used for an adult according to Shaller's rule, using enough granules dissolved in 24 teaspoonfuls of water so that each teaspoonful would contain a single dose?

We have taken pleasure in mailing our correspondent a pamphlet descriptive of aconitine, which will, we think, give him the information he desires.

It is not advisable to give aconitine at three-hour intervals. The digestive tract should be cleansed, obvious symptoms met with indicated remedies, and aconitine exhibited every thirty to sixty minutes to effect, remedial or physiological; i. e., until the fever falls and the skin becomes moist or evidences of aconitine-sufficiency (numbness of tongue and pharynx, etc.) are noticeable. It is useless to give aconitine and leave the intestinal canal full of toxin-producing material. In every case it is essential to clean out and keep clean; the skin should be kept active by the use of warm epsom-salt sponge-baths, and the toilet of the mouth and nose must receive attention.

Aconitine is, of course, soluble. In many instances it is desirable to use aconitine in combination with digitalis and strychnine; or aconitine, digitalin, and veratrine may be exhibited together, according as the situation may suggest.

Aconitine should not be held in the mouth. If a granule is retained on the tongue, a peculiar numbness will be felt at the point of contact; when air is drawn into the mouth a sensation of coolness is experienced.

A granule of aconitine taken half hourly in health or when not indicated in disease, for four or five doses, will usually cause a decided feeling of heat in the epigastrium. Larger doses, or small doses too frequently repeated, may cause a tingling in the fingers and toes, then in the hands and feet, and finally over the whole body. This tingling is one of the first physiologic manifestations of aconitine-sufficiency. In acute inflammatory diseases such tingling or numbness is not experienced until the remedy has gained control of the condition.

It is not desirable that one dose of aconitine should be entirely eliminated before the next dose is exhibited. It is impossible to produce a systemic effect in this way, as one should.

Shaller's rule applies particularly to aconitine, and we do not hesitate to give an adult one granule half-hourly or hourly to effect. Very young children may receive the weak dilution, i. e., one granule of aconitine for each year of the child's age in 24 teaspoonfuls of water; but if the patient is over 5 years of age, 1-12 of a granule is, in our estimation, the smallest effective dose.

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QUERY 5762.—"What is Erlenmeyer's Mixture?" A correspondent, V. G. A., Illinois, asks this question, and as others may encounter this name in their literature, the inquiry is timely.

Erlenmeyer was a famous German psychiatrist, and the mixture named after him is that well-known sedative for nervous conditions, especially epilepsy, containing, in equal parts, the three bromides of potassium, sodium, and ammonium, and usually combined with a bitter tonic like gentian.

Many of the extensively advertised antiepileptic nostrums—notably, in this country, "Father John's medicine"—are reputed to be essentially of this composition.

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QUERY 5762.—"A Puzzling Abdominal Growth." G. W. C., Missouri, describes a rather unusual and decidedly interesting condition observed in one of his female patients.

Patient, a woman 28 years old, mother of three children, says that when she was married there was a small "ridge around her belly at the navel" the size of her finger; this has grown till it is now 2½ or 3 inches thick at the umbilicus; the latter full and 1½ inches across, very tender and blue, as if bruised. This flap is 2 inches thick and hangs down so you cannot see the pubes unless it is raised up. There seems to be a large, sore mass just behind the navel, and connected therewith. This has gradually grown, but never caused inconvenience till of late. The patient is bothered with "menorrhagia" every two or three weeks for four or five months. The growth is not the abdominal muscles stretched or distended; it is simply a flap which starts from, say, 1½ inches below the umbilicus.

We regret to say that we cannot arrive at a definite diagnosis, even with the assistance of your pen-and-ink sketch. The mass you speak of as being behind the umbilicus may be of serious import. The flap itself is a peculiar abnormality. We are inclined to think that you have to deal with one of two conditions: (1) a lipoma which has undergone more or less degeneration, the mass behind the umbilicus being the original tumor and the "apron" of an angiomatous character; (2) an original umbilical hernia, with increasing omental protrusion. Under the circumstances, a plastic operation would seem to be indicated. Should you have to deal with an angioma of lipomatous origin, the operation might be a serious matter. A simple lipoma can, of course, be easily removed by an operation.

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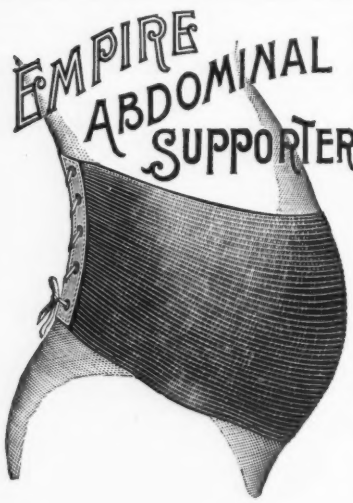

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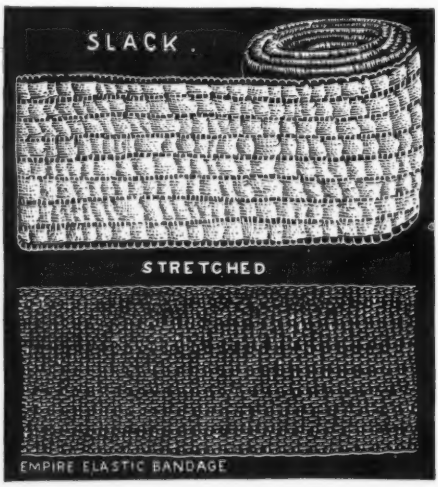

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Bovinine, the Food and Tonic for Brain, Body, Blood and Bone.

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High-grade Stationery for Physicians.

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Welch's Grape Juice

The Concord grape has more food value than any other.

The Chautauqua Concord grape has more food value than any other Concord.

We pay a bonus over the market price and get the choicest clusters grown in the entire Chautauqua belt.

No human hand touches these grapes after they are picked. Washing, stemming, pressing, sterilizing and bottling the juice is entirely mechanical and absolutely clean.

The result: The full nutrient value of the richest and best Chautauqua Concords—the grape sugar, gluten, mineral salts and fruit acids in readily assimilable form is found in Welch's Grape Juice.

Also, our process leaves in the juice all the properties, aroma and flavor of the fresh fruit.

Physicians prescribe WELCH'S with gratifying effect as a sustaining diet for the sick, a nutrient tonic for the convalescent and an alterative and health giving beverage for the well.

Sold by leading dealers everywhere. 4-oz bottle mailed for 6 cents. Sample pint bottle, express prepaid, 25 cents. Literature of interest to physicians free on request.

The Welch Grape Juice Co.
Westfield, N. Y.

tie a lantern over the dash and think I could see but was always paying blacksmith bills. Have not had an accident since I got your lamps. I was out last night and it was desperately dark and raining, and I wondered how I used to go, and why I was never killed. Now I do not dread the dark nights at all.

"R. S. PLUCKETT, M. D.

Carriere, Miss."

The price of the Night Drivers' Friend lamps is only $7.00 a pair. Express charges prepaid. Money back if not satisfied. They will be sent C. O. D. with privilege of examination and trial if desired. Address The Night Drivers' Friend Sales Co., Ansonia, Ohio, and kindly mention this journal.

AVOID ACCIDENTS WITH THE JOEY MELL

To Doctors who drive automobiles:

You want a signal on your car which will give you the right of way without a question. Pedes-

trians and teamsters are becoming carelessly accustomed to the monotonous "Honk-Honk" of the auto-horn. The Joey-Mell signal clears the road in a jiffy. The musical horn is all right for a circus parade to attract attention, but you want people to move and then look if they wish, just as Mr. C. B. Doten of Portland, Maine, says, "I have had several exhaust signals on my car, one of them a four-tube chime horn which cost in the neighborhood of $35.00, but I must say that the Joey-Mell is far ahead of any I have yet used. Other signals which I have had made people who heard it turn around to see what was coming. *Now they turn out first and look afterwards.* Mr. W. W. Dean, Cashier of the First National Bank of Adams, Minnesota, writes, "To get a farmer with a big lumber wagon off the road quick there is nothing to compare with the Joey Mell Signal."

The features of the Joey-Mell Signal are that it is operated by foot treadle, does not clog or stick, so easy to adjust, takes up very little space and requires absolutely no attention after its installation. Then, too, the price is but $6.50 complete. Money back if not satisfied.

Address Joey-Mell, 1408 Michigan Ave., Chicago, Ill, and please mention THE AMERICAN JOURNAL OF CLINICAL MEDICINE.

TUBERCULOUS DISEASE AND ASTHMA

Clinical experience shows that Iosaline, a preparation containing alcohol (70 percent) combined with iodine, oil of wintergreen and menthol (applied externally), is highly efficacious in the treatment of tuberculous disease, all forms of pleuritic pains, pleurodynia and muscular soreness. In bronchial and spasmodic asthma it is used successfully to relax spasm and promote expectoration, and in the dry hacking cough of tuberculosis it has also unquestioned value.

The Iosaline Company, 559 Broome Street, New York City, are willing to satisfy the physicians as to the merits of this treatment by sending them literature and a sample. A mention of CLINICAL MEDICINE will be appreciated.

PRIVATE GARAGES AND THEIR EQUIPMENT

In the ever-spreading use of automobiles there is no matter of more importance to buyers and users than the value of turntables in private garages, and they afford real economy in the utilization of space.

Personal care of a car, or at least personal supervision, is most satisfactory in that it lowers the cost of maintenance and repair, lengthens the life of the car, assures its being always ready for use, and always on hand when wanted.

About the most useful device that has yet been applied to private garages is the Pitless Turntable which is doing more than anything else to contribute to garage building, because most difficult situations are met by it and overcome. An automobile owner may have barely enough driveway to get his machine into the garage. To back it out again into the street is perilous to the most expert driver and dangerous to the safety of the automobile, while women and children with electrics should never under any circumstances be exposed to such hazardous risks.

The Pitless Turntable completely overcomes this obstacle.

A private garage may be as expensive or inexpensive as one is able to make it; but it can and should be just as useful to the owner, if it costs him but $100, as one that might cost $10,000. Some very satisfactory one-car garages have been built for from $100 to $500, to which should be added the cost of a working outfit, amounting to about $110. To anyone interested in this subject The Pitless Turntable Co., of Kansas City, Mo., will

mail free, upon receipt of a postal request, a pamphlet of records gathered from various parts of the country giving some splendid ideas on how to arrange a private garage most practically and economically—not in the form of an advertisement but more as a guide to those in need of the information, and upon receipt of 10 cents to cover the mailing expense a full set of working plans showing how to best build a private garage at a flexible range of costs in wood, concrete or stucco construction.

MEDICATED VAPORS

This is the subject of an interesting booklet issued by The Abbott Alkaloidal Co., of Chicago. It gives a very intelligent idea of how the diseased respiratory tract may be medicated by means of vapors; and shows how to carry it out in a practical way.

The earliest use of medicated vapors was by heating water, in a basin on the stove, adding to it whatever remedy was called for, and inhaling the steam. Next the common atomizer came to hand: and after that the nebulizer, which evolved into a big and complex piece of apparatus.

The happy medium is the Vapo-Medicator; this new and ingenius device will do all that any nebulizer can do, and even more. It is inexpensive—costing only a few dollars.

Many doctors are adding it to their office equipment and find it a great aid in nose and throat work.

SOME VALUABLE DATA

The Purdue Frederick Co. of New York City have printed an interesting folder giving the solubility and doses of 75 important chemicals. This folder will be mailed free to CLINICAL MEDICINE readers on request and a mention of this journal.

"IMITATION VERSUS LIMITATION"

This is the neat title of an interesting little booklet being circulated to the medical profession by The Pomeroy Company of New York City. When asking kindly mention CLINICAL MEDICINE.

chambers, the pressure being exerted upon the inside of the diaphragm, and it is therefore not in any way affected by changes of atmospheric pressure or altitude.

In the construction of the diaphragm great care has been given to the scientific selection of metals of the proper tensile strength and freedom from influences of oxidation. It therefore may be relied upon, absolutely, for the fine determination of systolic, diastolic and pulse pressure.

In determining diastolic pressure, mercury is quite unsatisfactory owing to the fact that the recovery of mercury from a slight impulse requires one and one-half seconds, whereas, under normal conditions, there are one and one-quarter impulses of the heart per second. The diaphragm chambers of the Dr. Rogers' "TYCOS" Sphygmomanometer will, under pressure, respond instantly to the variations at points of diastolic pressure, showing the oscillations as rapidly as they occur, allowing the observer ample opportunity to take the minimum reading before the apparauts is influenced by a second impulse.

In the Dr. Rogers' "TYCOS" Sphygmomanometer there is neither glass tubing to break nor mercury to spill. There is no hard leather cuff nor straps to buckle up. The entire apparatus is contained in a handsome Morocco case and weighs, complete, less than 15 ounces. It may be carried with ease in the physician's coat pocket without fear of putting the instrument out of adjustment.

The Taylor Instrument Companies, Rochester, N. Y., manufacturers of the Dr. Rogers' "TYCOS" Sphygmomanometer, have issued a valuable and interesting little digest on Blood Pressure, which they will send, gratis, to any physician requesting it. Ask for booklet, "The Sphygmomanometer."

A WORD OF ANTISEPTIC SOAPS

The soaps ordinarily used by the doctors in the past, and still used by some, owe their germicidal quality to the bichloride or other salt of mercury.

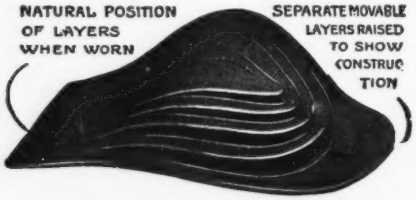
Against such soaps however, there are serious objections and we are not surprised to find them passing out of use. Containing, as most of them do, chemicals that are markedly toxic and besides a large proportion of caustic soda, they are almost without exception irritating to the skin's surface, and hardly safe to recommend to one's patients. Not a few cases of poisoning have been reported recently from the use of bichloride soaps employed for vaginal douching.

In lieu of the above our readers will be glad to hear of one antiseptic soap that is free from those drawbacks. That one is Carbenzol Soap. It is made of a refined, alkali-free, fatty base incorporating an oil distilled from lignite. Its odor reminds one of tar. The oil owes its germicidal effect to phenols and guaiacols.

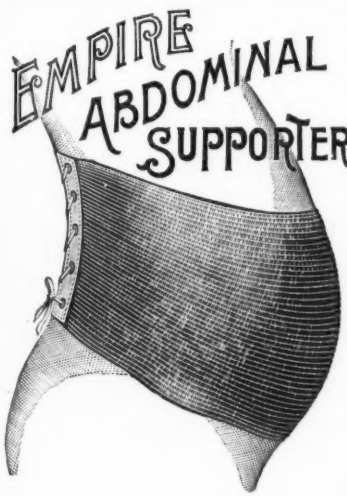
If not the very best, it is certainly *one* of the best all-around antiseptic soaps made, serving well the various uses to which the doctor may put such an article in every-day practice. The Abbott Alkaloidal Co., of Chicago, make it. They are just now sending out sample cakes. All who have not been supplied should write in for them.

irritation of the entire nervous system may be the result.

More often than is imagined supposed spinal disorders disappear coincidentally with the relief of an old-standing depression of the arch.



The rational support does not make pressure upwards in the hollow of the foot: it is not there that support is required; in fact steady upward pressure upon the tendons and ligaments must work serious injury. The Venus Arch Support bears the weight of the body on the heel—where Nature intended. A depression in the support affords a broad level surface upon which the heel rests in a normal position. A properly curved shoulder between the heel and front part of the appliance provides a graduated support to and prevents rolling inward of the side of the foot. Not a single ounce of weight is borne directly by the arch and no *pressure* is made upon the sensitive structure of the middle foot. Naturally, the abnormal conditions having been corrected and the weight of the body falling upon points normally making contact with the ground, the strained tendons and ligaments regain their proper tension and the irritated nerves cease to make an outcry.



EMPIRE ABDOMINAL SUPPORTER. is superior to all others for the following reasons:

1st. It adapts itself to every movement of the body, giving strong and even support.

2nd. It produces warmth without irritation or sweating, as it is perfectly ventilated.

3rd. In pregnany, corpulency, tumors or other cases of enlargement of abdomen, it supports weight of body from the backbone, relieving the sinews of their overwork.

4th. Its easy appliance (lace and draw on over head or feet).

5th. It is cheap, durable; it can be washed when soiled, proper care being taken to cleanse in lukewarm water and dry in shade.

In ordering give largest measure of the abdomen.

PRICES

8	inches wide		$2.50
11	" "		3.00
8	" "	Silk Finish	3.50
11	" "	" "	4.50
8	" "	Double Rubber	3.00
10	" "	" "	3.50
12	" "	" "	4.00

The Empire Elastic Bandage

Specially Adapted for Varicose Veins

We invite the attention of the medical and surgical profession to the various merits combined in our bandages.

1st. **Its Porosity.**—The greatest in the "EMPIRE." It never causes itching, rash or ulceration under the bandage.

2nd. **Its Elasticity,** which will enable the surgeon or nurse to put it on at any required tension, and which will follow a swelling up or down, as the case may be, a feature unknown to any other bandage.

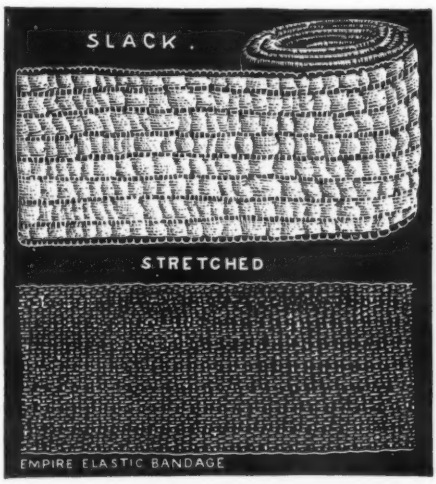
3rd. **Its Absorbent Properties** — Greatest in the Empire.

4th. **Its Easy Application** to any part of the body, not being necessary to fold over, as with other bandages, as it follows itself with equal uniformity around any part of the abdomen.

5th. **Its Self-Holding Qualities**—No bother with pins, needles and thread, or string, so tiresome to surgeons, as simply tucking the end under the last fold insures its permanent stay until its removal for purpose of cleanliness.

6th. The only bandage that is **Superior to the Elastic Stocking** for varicose veins.

Send $1 for 3-inch by 5-yard bandage on approval



The Empire Umbilical Truss

Is an Abdominal Supporter with Button Inserted at Navel

Is made of the same material and possesses the same merits as the Empire Elastic Bandage and Empire Abdominal Supporters, and it is pronounced by all who have seen it to be the best in the world. **All our goods are sent free by mail upon receipt of price, and money refunded if not satisfactory.**

PRICES

Infant, hard pad	$1.25	Infant, soft pad	$1.50
Children, hard pad	2.50	Children, soft pad	3.00
Adult, hard pad	4.00	Adult, soft pad	5.00

ALL ABOVE PRICES ARE NET TO PHYSICIANS

MANUFACTURED BY

EMPIRE MFG. CO., 7 Spring St., Lockport, N. Y., U. S. A.

The Venus Support is rational not only in design but in construction; it consists of several layers of specially treated leather and is to a certain extent self-adjusting; the spring of the separate layers affording just the amount of support required by the particular foot to which it is applied. To wear a Venus for a day or two is to be convinced that foot troubles due to arch distortion can be immediately relieved and ultimately cured.

Send for literature, mentioning this journal, to The Venus Arch Support Co., Milwaukee, Wis.

HOT MEALS FOR NIGHT WORKERS

Doctor, here are twenty good reasons why your wife should have an Ideal Fireless Cooker in her kitchen:

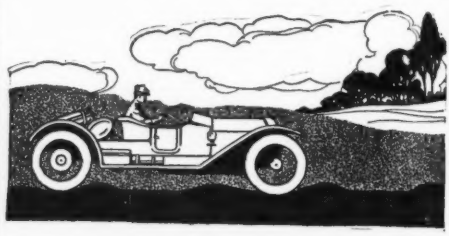
It does not overcook.
It costs nothing to operate.
It saves energy and anxiety.
It saves at least 75 percent of fuel.
It does not require watching.
It is wasteful to be without it.
It works while you visit, shop or sleep.
It is offered you on thirty days' free trial.
It prevents the burning of cooking utensils.
It does away with steam and cooking odors.
It has few utensils and they are easily cleaned.
It makes the cheaper foods usable and desirable.
It enables you to go to church without anxiety.
It does not overheat the kitchen in hot weather.
It makes failures in cooking well-nigh impossible.
It develops the proteids as no other cooking medium does.
It saves three-fourths of the time usually devoted to cooking.
It is scientific, sanitary, satisfactory, and besides a handsome bit of furniture.
It makes a hot midnight lunch possible without extra labor or inconvenience.
It solves the culinary problem for those who must be away from home all day.

Here is an "Ideal" Christmas Present for your good wife. Send at once for prices and booklet to The Toledo Cooker Co., Toledo, Ohio, and kindly mention this journal.

IMPORTANT

Doctor, do not overlook that announcement of The New, Revised and Enlarged "ALKALOIDAL THERAPEUTICS" (W-A) in this issue of CLINICAL MEDICINE. The work, which has been in preparation for years, is now ready for delivery. It is years in advance of any medical text-book now being sold. In view of the increasing interest in active-principle therapeutics, your library is not complete without this book. Send Five Dollars, and the volume will be expressed to you prepaid, with the privilege to return at our expense and money back if you are not satisfied. Address Book Department, THE AMERICAN JOURNAL OF CLINICAL MEDICINE, Chicago.

IN ALL forms of blood dyscrasia—as indicated by skin disorders, bad healing power and general debility—Ecthol often proves effective when other treatment fails. It quickly raises the antitoxic and socalled opsonic power of the blood, increases the resisting power of the tissues and thus minimizes the dangers of bacterial attack. Healing processes are stimulated, and the whole economy is materially improved in its vital details.



Speed with Ease over those Rough Stretches

Here is a device that enables you to take rough roads at no appreciable reduction of speed and without the usual uncomfortable jolting and bouncing. The

Truffault-Hartford SHOCK ABSORBER

controls the rebound in such a manner that the springs are at all times working within their normal limits—with cushion-like ease and regularity.

All automobile springs possess the common tendency toward rebounding with inordinate force under the stress and strain of rough going. These rebounds, sometimes of sufficient force to veritably lift the wheels of the car off the ground, are ruinous to mechanism and tires alike. It may safely be said that half your car and tire troubles are the direct result of this violent spring action.

Truffault-Hartfords offer the one logical control to these rebounds. And unlike some other devices, they do not impair the easy riding qualities of your car under normal road conditions.

Your car needs Truffault-Hartfords. They more than double your car comfort, economy and safety.

The "Juniorette" for the Light Cars

For all the smaller makes—car up to 1200 lbs. —we advise this size. In design and material it is identical with the larger sizes. It was made to satisfy the demand for an efficient shock absorber for cars in the weight-class of the Maxwell AA, Hupmobile, Ford, etc. The price is $15.00 per set of four with fittings.

FOUR MODELS

	SET OF 4		SET OF 4
The Standard for cars over 2500 lbs. . . .	**$60**	**The Junior** for cars from 1200 to 1800 lbs.	**$25**
The Intermediate for cars from 1800 to 2500 lbs.	**$45**	**"The Juniorette"** (as described above).	**$15**

Write us for our new catalogue. It's worth while.

The HARTFORD SUSPENSION CO.
Edw. V. Hartford, Pres.
173 Bay Street, Jersey City, N. J.

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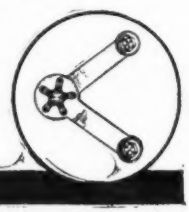

THE general practician who does occasional x-ray work usually experiences great difficulties in getting good radiographs and therapeutic results, and many have given the work up in disgust, not that the apparatus itself was out of order, but the negatives turned out failures anyway. In attempting to obtain certain therapeutic effects by following the technic of some other practician, the results have been equally disappointing. The cause has been the rather vague and indefinite description given and uncertain standards used. By introducing a special x-ray milliammeter, to measure the current passing through the tube, and a penetrometer, to record the penetration of the tube used, these uncertainties are eliminated. For radiographic work an exposure-meter is added, which indicates correctly the time of exposure required, in seconds, at any distance from the tube to the plate, for any thickness of body, any penetration of tube as measured by the penetrometer and any current indicated by the milliammeter. That this simplifies x-ray work enormously and puts it on a basis where one operator may obtain as good results as another with little regard of apparatus or personal equation, goes without saying.

The Wm. Meyer Co., 12 S. Clinton St., Chicago, Ill., are offering these devices, which are destined to put a new stimulus on x-ray work.

See their offer for free instructions on another page in this issue.

WELCH'S BUY THE WALKER PLANT

Large new factory at North East, Pa., added to equipment of the Welch Grape Juice Company.

The announcement that the Welch Grape Juice Company, of Westfield, N. Y., has purchased at receiver's sale the practically new plant of the Grape Products Company, of North East, Pa., is another chapter in grape juice history.

The Grape Products Company was launched two years ago, to manufacture Walker's grape juice. The company acquired a fine site at North East, 16 miles from Westfield, and like Westfield has a commanding position in the Chautauqua grape belt.

A fine reinforced, concrete factory building was erected on this site. The site, by the way, was under consideration by the Welch Grape Juice Company three years ago, before the Grape Products Company took it.

The Grape Products Company went into aggressive action for grape juice business. It advertised lavishly in the magazines and secured a good distribution for its product.

The Welch Grape Juice Company went right on, carrying out its own policies and caring for its growing business. The Welch Grape Juice Company is the pioneer in the business and it has made the grape juice business what it is today. Last year the capacity of its two factories at Westfield was tested nearly to the limit. It was seen that again the facilities of the company for making and storing, as well as for distributing Welch's grape juice, would have to be enlarged.

To secure the largely increased facilities required, The Welch Grape Juice Company purchased the

North East plant at receiver's sale. None of the Walker grape juice stock was bought. They purchased the land, building, machinery and corporate franchises of the Grape Products Company. The remaining stock of Walker's grape juice, advertising material, bottles, etc., was otherwise disposed of by the receivers.

The North East plant is 410 feet long and 112 feet wide, three stories above ground, with a 20-foot deep storage cellar under the entire building. Its storage capacity is practically the same as that of the Welch factories at Westfield. This now gives the Welch Company doubled storage capacity, which is necessary to keep pace with the increasing popularity of "The National Drink."

THE National Physicians Exchange presents a medium of barter and exchange to the physicians which is on lines similar to that employed in the commercial fields.

It is a well-known fact that at this time there are thousands of dollars' worth of apparatus in physicians' offices that are of no value to their present users, yet which have a distinct commercial value, and if placed in suitable hands where proper disposition can be made, become again of value.

It is not to be understood that the National Physicians Exchange will sell or consider apparatus which has become obsolete. Every piece of apparatus taken in by this company must have a distinct value to the profession.

A letter to the National Physicians Exchange, 30 E. Randolph St., Chicago, will be the means of securing for you further data which will enable you to better judge their plan of action. Kindly mention this journal.

Business Opportunities

For Sale, Exchange, Help Wanted, etc., $2.00 for 25 words or less; additional words 8 cents each. Send cash with order.

MEDICAL ASSISTANTS—WE HAVE SEVERAL vacancies in hospitals and sanitariums, for salaried assistants. Practices bought and sold in all sections of the United States. List of practices for sale and other information sent free on application by addressing "The Medical Echo," Lynn, Mass.

DOCTOR, IF YOU EVER NEED FOR A PATIENT a reliable and reputable Maternity Home, see our advertisement in this Journal. Union Park Maternity Home.

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ENGRAVOTYPED STATIONERY IS THE LATEST form of stationery for professional people. It is a perfect imitation of steel die stamping. Samples on request. Clifford D. Stone, Snowflake Bldg., Toledo, O.

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THE SEXAUL DISABILITIES OF MAN AND THEIR Treatment. By Cooper. New Revised, Enlarged Edition. Chapters on Sterility and its Treatment, Sexual Physiology, Impotence and its Treatment, etc. Every doctor should have a copy of this valuable work in his library. Price $2.00, postpaid. Cash with order. Money back if not satisfied. Book Department, THE AMERICAN JOURNAL OF CLINICAL MEDICINE.

SPECIAL X-RAY BARGAINS:

1 Victor portable outfit	Cost	$160.00	$ 80.00
1 Western 12 portable outfit	"	250.00	130.00
2 Mercury turbine interrupters	"	@ 75.00	@ 25.00
1 8 " battery coil (These may be used with	"	110.00	50.00
1 6 " " " electrolytic interrupter	"	90.00	35.00
1 Queen Mechanical interrupter	"	65.00	25.00

We guarantee the above-mentioned apparatus to be in perfect working order. See our Ad. in the October issue.

THE WM. MEYER CO.
12 So. Clinton St., Chicago, Ill.

FOR SALE—DRUG STORE IN ST. LOUIS—AN EXceptionally fine opportunity for physician; high-class store doing splendid business; opportunity of a lifetime for right man. For full particulars address P. O. Box 1524, St. Louis, Mo.

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WANTED—RELIABLE SALESMAN CALLING ON physicians to offer newly perfected portable ozone machine. Fine opportunities. In writing give territory covered, etc. Address No. 1143 care of A. J. of C. M.

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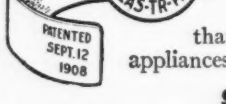

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FOR RUPTURE. WHY? Simply because not more than **one** out of **ten** of these old-fashioned oft-proven injurious appliances give your patients satisfaction.

STUART'S PLAS-TR-PADS

are a NEWLY patented self-adhesive 20TH CENTURY arrangement and are ENTIRELY DIFFERENT from the truss, being medicine applicators made self-adhesive purposely to hold the parts securely in place—NO straps, buckles or springs. CANNOT slip, so CANNOT chafe or COMPRESS against the pelvic bone. Have CURED the most OBSTINATE cases in a few days. EASILY APPLIED—SOFT AS VELVET—INEXPENSIVE. Thousands have been SUCCESSFULLY treated without hindrance from work.

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AN ocean of hair tonic will not do nearly so much toward cultivating and preserving hair like this as a single cake of **Carbenzol Soap.**

This soap is made for the doctor and his circle exclusively. It is the soap *you* should use—the one your family should use—the one every nurse should use—for the weekly or fortnightly shampoo. No soap sold to the public at large is half so satisfactory for keeping the hair and scalp in good condition.

Carbenzol Soap

"Best For Shampooing"

It is best because it contains no biting alkali nor rancid fat—it is absolutely pure; because it makes a bounteous, creamy lather in a twinkling; because it removes every bit of accumulated matter, leaving the scalp refreshingly clean; because it is antiseptic and effectually destroys all surface bacteria and their spores.

For dandruff, seborrhea, pruritus, premature falling of the hair, eczema and other disorders of the scalp, it is an ally no doctor can afford to overlook.

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THE ABBOTT ALKALOIDAL CO.

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Schools, Colleges and Sanitaria

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An ethical, homelike institution for the exclusive care and treatment of Alcohol and Drug Addictions.

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Tuberculosis.

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South Pasadena, California,
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Dr. T. W. Bishop, Medical Director

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For Mental and Nervous Diseases.
Special department for cases of inebriety.

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For special treatment of spirit and drug neurosis,
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Rockford, Ill.,
Opium, Alcohol and Nervous Cases.

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A private residential rest retreat for morphinism and other addictions. Liquor habit cured in three days.
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Nervous and Mental Diseases.

Kentucky:
Beechhurst, Louisville, Ky.,
Dr. M. H. Yeaman, Supt.,
Mental and Nervous Diseases.

Michigan:
Oak Grove Hospital, Flint, Mich.
Dr. C. B. Burr,
Nervous and Mental Diseases.

Missouri:
The Punton Sanitarium, Kansas City, Mo.
A Private Home Sanitarium for Nervous and Mild Mental Diseases.
Dr. G. Wilse Robinson, Supt.

The Ralph Sanitarium, Kansas City, Mo.,
Dr. B. B. Ralph,
Nervous Diseases, Alcohol and Drug Habits.
No mental cases.

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Non-contagious Chronic Diseases.
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New York:
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All classes of Acute and Chronic Non-Contagious Diseases,
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Situation most beautiful.
Advantages unsurpassed.
Treats all diseases not objectionable.
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Southern Pines, North Carolina,
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W. C. Ashworth, M. D., Supt.

South Carolina:
Dr. Corbett's Place, Greenville, So. Car.
Liquor and Drug Habits.
Dr. L. G. Corbett.

Pennsylvania:
Easton Sanitarium, Easton, Pa.,
C. Spencer Kinney, M. D., Proprietor,
Elderly Invalids and Mild Mental Cases.

The Walter Sanitarium, Walters Park, Pa.,
Robert Walter, M. D., Founder and Manager.

Tennessee:
Lynnhurst, Memphis, Tenn.,
S. T. Rucker, M. D., Medical Supt.,
Nervous Diseases and Drug Addictions, etc.

Drs. Pettey & Wallace's Sanitarium, Memphis, Tenn.,
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W. R. Wallace, M. D., Resident Physician,
Alcohol and Drug Addiction, Mental and Nervous Diseases.

Virginia:
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Oconomowoc Health Resort,
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Nervous and Mild Mental Diseases.

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Of An Occurrence

This manager of the family had finished her usual allowance, and with a convenient camera was shot in the act of "going after" more.

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Post Toasties

and the food is good for them. That may be depended upon.

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